

MEDICAL LIBRARY

DEC 17 1938

SAINT BARTHOLOMEW'S HOSPITAL JOURNAL



DECEMBER, 1938

VOL. XLVI, No. 3

PRICE NINEPENCE

CONTENTS

	PAGE		PAGE
Calendar	49	The Fires of Smithfield. By P. W. Isaac ...	67
Sense and Sensibility	49	A Case of Metropathia Hæmorrhagica. By	
Current Events	51	John Gluckman	68
Gill's Rahere	52	Three Unlucky Deaths. By G. L. A. ...	69
Bronchiogenic Carcinoma: with Special Refer-		Our Candid Camera	69
ence to Treatment. By Oswald S. Tubbs,		Correspondence	70
F.R.C.S.	53	Sports News	71
The Treatment of Mental Illness by Means of		Reviews	74
Induced Hypoglycæmia and Cardiazol. By		Recent Books and Papers by St. Bartholomew's	
J. Sawle Thomas, M.R.C.S., L.R.C.P.,		Men	75
D.P.M.	56	Official Matter	76
A Bedouin Practice. By S. Avery Jones,		Personal Column	76
M.R.C.S., L.R.C.P.	59		

INSURANCE for YOURSELF

In these days a
Personal Accident
Policy is more of
a necessity than
ever before

Full information regarding the "Car & General" Personal Accident Policy will be sent without obligation. The same high standard of security and service which characterises "Car & General" Motor Policies applies to every other class of business transacted by the Company.

CAR & GENERAL

INSURANCE CORPORATION LIMITED

83 PALL MALL, LONDON, S.W.1

ST. BARTHOLOMEW'S



HOSPITAL JOURNAL

VOL. XLVI.—No. 3

DECEMBER 1ST, 1938

PRICE NINEPENCE

CALENDAR

Fri., Dec. 2.—Dr. Graham and Mr. Wilson on duty. Medicine : Lecture by Prof. Christie.	Tues., Dec. 13.—Dr. Chandler and Mr. Roberts on duty.
Sat., „ 3.—Rugby Match <i>v.</i> Trojans. Away. Association Match <i>v.</i> Westminster College. Home. Hockey Match <i>v.</i> Surbiton II. Away.	Wed., „ 14.— Last day for receiving letters for the January issue of the Journal.
Tues., „ 6.—Dr. Evans and Sir Girling Ball on duty.	Mon., „ 16.—Dr. Gow and Mr. Vick on duty. Last day for receiving other matter for the January issue of the Journal.
Wed., „ 7.—Surgery : Lecture by Prof. Ross. Hockey Match <i>v.</i> Aldershot Command, R.A. Away.	Sat., „ 17.—Rugby Match <i>v.</i> Old Blues. Home. Association Match <i>v.</i> Westminster College. Away.
Fri., „ 9.—Prof. Christie and Prof. Patterson Ross on duty. Medicine : Lecture by Dr. Harris.	Tues., „ 20.—Dr. Graham and Mr. Wilson on duty.
Sat., „ 10.—Rugby Match <i>v.</i> Old Millhillians. Home. Hockey Match <i>v.</i> R.N.C., Greenwich. Home.	Fri., „ 23.—Dr. Evans and Sir Girling Ball on duty.
Sun., „ 11.—Association Match <i>v.</i> Parsloes and District Football League. Home.	Tues., „ 27.—Prof. Christie and Prof. Patterson Ross on duty.
	Thurs., „ 29.—Rugby Match <i>v.</i> St. Edward's Martyrs. Home.
	Fri., „ 30.—Dr. Chandler and Mr. Roberts on duty.

SENSE AND SENSIBILITY

MOST practitioners will have come across followers of the Anti-Vivisection Societies in one way or another : perhaps they have had to face an irate old lady across the tea-cups, and defend themselves against the charge of "torturing" animals, or perhaps to try and convert those who refuse vaccination or inoculation, and so endanger their own lives or the lives of their

children. They are invariably high-minded people whose honesty is patent; their only fault, that in them Sentiment is master of Reason. Probably they were walking down the street one day and had their attention arrested by a shop window which displayed stuffed dogs in a deformed and bulging condition, and cats caught in the grip of infernal machines. They entered the shop, drawn partly by genuine

feeling, partly by morbid curiosity, and then were subjected to as efficient a piece of propaganda as any totalitarian state can produce.

The first attack is on the emotions. They are told of the wholesale torturing of animals, the baking of rabbits to death, the maiming of dogs, and are asked whether they would allow such things to happen to their pets, and that 785,627 such experiments upon living animals were performed without anæsthetics in 1936. Any advantages that are claimed to result from such practices are discredited by appeals to "common sense". For instance, "Do you know that vaccines are preparations of germs? These germs which are injected with the object of preventing a disease are the very germs that are said to *cause* the disease"; or "The introduction of the products of disease and other foreign matter into the system, through a puncture in the skin, has only been made possible by the invention of the hypodermic syringe; it is a most dangerous practice and one that is quite outside the provision of Nature". The rise of the diabetic death-rate, the failure of vaccines in diphtheria and typhoid, and the disasters that have occurred through their use, are pointed to as showing the uselessness of the benefits that the scientists claim have resulted from their painful experiments on animals.

How can the unfortunate research or medical worker gain reassurance that he is not the monster he is painted, and that the treatment of diabetes, diphtheria and other diseases has progressed and not regressed?

In regard to the question of "torture" he can refer to the Home Office White Paper on the experiments performed on animals for England during the last year.*

Here he will find that any research worker must obtain a licence from the Secretary of State before he can experiment on animals; that he must work in a registered place, and that, "In no case has a Certificate dispensing entirely with the use of anæsthetics been allowed for an operative procedure

more severe than subcutaneous venesection. Serious operations are always required to be performed under an anæsthetic". Under licence, the animal must be killed before coming round from the anæsthetic, under Certificate B, the animal is allowed to recover from the anæsthetic, but if at any time "the animal is found to be suffering severe pain which is likely to endure" it must be killed forthwith. Certificate A allows experiments without anæsthetics and includes inoculations and injections, and a separate certificate where the animal is a dog or cat is also necessary. This covers inoculations and injections. In a very large number of cases the results are negative; in positive cases even when the termination is fatal there is very little pain.

In 1937 the number of places registered for animal experiments was 376, and to these 901 visits of inspection were made, for the most part without previous notice. "The animals were found to be suitably housed and well cared for, and the licensee generally attentive to the requirements of the Act and the conditions attached to the licences." Only seven minor irregularities were reported, through misunderstanding of the conditions, and in all cases the offenders were warned or admonished. One example of an offence was: "A licensee not holding an appropriate certificate performed experiments on rabbits involving the simple injection of drugs. He explained that as the drugs which were used had anæsthetic properties the experiments would come within the scope of a Certificate B, which he held. He was warned to exercise greater care in future."

This pamphlet shows that the "tortures", which are alleged, are as much fantasies as Pluto's adventures with the Mad Doctor.

In regard to the fallacy of the Anti-Vivisection statistics, the reader should consult a book by Sir Leonard Rogers, Hon. Treasurer of the Research Defence Society,* in which the saving of life and pain to animals and man which has resulted from animal experiment is fully discussed. He also

* *Experiments on Living Animals*. H.M. Stationery Office, 1938. Price 1s.

* *The Truth about Vivisection*. J. & A. Churchill, Ltd., 1938. Price 5s.

deals with the history of the movement and sifts the evidence of the Commission of 1905-1912, which found completely against the Societies.

Finally, in approaching the question of animal experiments from the ethical point of view, it can be argued that for a human to benefit from the discomfort or premature death of an animal is immoral in itself. And one respects the holders of such views even if they are not shared; they believe that pain or death should not be inflicted on an animal even though the inflicting of pain may lead to the prevention of many times that pain in the future. If the anti-vivisectionists based their claim on this point of view, their case would be a much stronger one: as it is they do not. The number of gelding operations that are performed in a year to produce tender meat totals ten million. The operations are painful and are performed without anæsthetics, and are in fact the only form of vivisection that is allowed under English Law. Yet the Societies turn a blind eye to these practices, and member after member when giving evidence before the Commission had to admit that in not being a vegetarian his attitude was inconsistent.

It may be asked why a body of people should not be left to maintain their sincere though misguided beliefs in peace. It may be desirable, but is impolitic. The societies are rich. Sir Leonard Rogers estimates their capital at £200,000, and their income from investments and subscriptions at £40,000. Not only is charitable money deflected from purposes which can well be regarded as more worthy, but devotees are encouraged to withhold subscriptions from hospitals unless their attitude is recognized. The partial success of the campaign against anti-typhoid and anti-tetanus prophylaxis amongst the troops in the last war is only one example of the dangers that may result from such propaganda.

Stephen Paget, who spent much of his life defending the medical profession against the attacks of the Anti-Vivisection Movement, summed it up in these words: "It gives us very fine sentiments, but is tainted through and through with falsehood. I know that many who believe in it are honourable and full of kindness. But I have studied it for thirty years, and I have come to feel sure that it ought to be regarded as the enemy of the people."

CURRENT EVENTS

THE OLD STUDENTS' ANNUAL DINNER

This dinner took place on November 21st at Charterhouse, and if good food, good wine and good company mean anything in this time of insecurity, it was as great a success, if not greater, than it has been in the past.

Mr. Harold Wilson, the Chairman, regretted on the behalf of all present that our President, the Duke of Gloucester, had been prevented from attending, owing to the death of Queen Maud. In recounting the events of the past year he mentioned the efforts of staff and students in the recent crisis, and emphasized that if our fears in October were ever realized in the

future it was essential that the work of the Medical School should continue. The School should move into the country with the patients and those members of the staff who would not remain in the Casualty Clearing Hospital should go too as teachers.

Sir Girling Ball in proposing "The Guests" referred to the long association of Henrys and Alwyens with the Hospital, and rejoiced that now a Henry, the sixth of his name, should be President of the Hospital, and an Alwyen Treasurer.

May all those present enjoy many another such pleasant dinner in the future.

THE A.D.S.

Rehearsals of "Loyalties" have now started, under the vigorous production of Leslie Gibson, who should score as good a success with this play as he has done many times before. The play will be performed in the Great Hall on four consecutive nights—Tuesday to Friday, January 17th to 20th.

The A.D.S. has been appointed to undertake the annual production of a *Pot Pourri* of the Christmas Shows as representatives of the Students' Union, and producers of shows are asked to note the date of the performance, which will be on Friday and Saturday, January 6th and 7th, at the Cripplegate Institution.

A scrap-book of the Societies' activities over fifty years has been placed in the Library and may be seen on request to the Librarian. It consists of photographs and press-cuttings, and is very well worth remembering when the more serious works that some people seek there begin to pall.

ROUND THE FOUNTAIN

We have several copies left of the last edition of this famous classical work. As a special Christmas kindness to which we are not often prone, we have reduced the price to sell off quickly before the next edition arrives:

7s. 6d. copy beautifully bound, now 3s.

3s. 6d. copy not so beautifully bound, now 1s.

NURSE

(With apologies.)

I know two things about a Nurse;
The second is by far the worse.

GILL'S RAHERE



WHEN Mr. Eric Gill's characteristic design appeared on the cover of this Journal in February and March of this year it was received by no means indifferently.

The Monk had once more come to move the citizens: to tantalize the puritans, to delight and amuse others. The degrees of opinion concerning this woodcut varied in the main between, those who approved the design, those who approved, but did not think it suitable for the cover of this Journal, and those who condemned it in every way.

The Publications Committee, who did not wish to see this design by such an eminent Artist fall into oblivion, were prompted to preserve it in some way, and it was decided unanimously to have it printed as a limited edition. Mr. Eric Gill's co-operation was sought and readily given: for this we are exceedingly grateful.

The edition for which subscriptions are now invited is limited to 100 copies only, of which 25 are signed by the Artist. It is printed on handmade paper, and accompanying it is a short note by Mr. G. L. Keynes.

Those who wish to reserve a copy should do so as soon as possible owing to the limited number available and also the popularity of Gill's work among collectors.

Reservations should be addressed to E. F. Stewart, c/o The Journal Offices, St. Bartholomew's Hospital.

Prices of the Edition will be:

2 Copies printed on Vellum,				Numbered and signed by the Artist.
			£2 2s. each	
23	..	..	Handmade paper, 10/6 each	Numbered only.
75	..	..	Handmade paper, 3/6 each	

BRONCHIOGENIC CARCINOMA: WITH SPECIAL REFERENCE TO TREATMENT

By OSWALD S. TUBBS, F.R.C.S.

THE medical profession is still unable to offer a reasonable chance of cure of carcinoma of certain organs of the human body either by extirpation or by irradiation. The prostate, pancreas and oesophagus are examples of such organs, for the results of the many efforts at cure have been so discouraging that palliation is usually all that is attempted at the present time. Unfortunately, primary bronchiogenic carcinoma has been in this category until recently, and it is generally maintained that, cure being impossible, the best that can be done is to treat the disease with deep X-ray therapy (frequently without histological proof) and hope for the best.

The numerous and great obstacles associated with radical treatment of bronchiogenic carcinoma have apparently discouraged many from embarking on the problem. Evidence of this is shown in the extreme paucity of work on the subject published in the British literature. However, a recent review of the subject by Crafoord of Stockholm shows that an enormous amount of work has been done abroad, particularly in the United States, and that this work has been rewarded with a certain measure of success.

During a year in the U.S.A. I have had the good fortune to be associated with some of Dr. Overholt's remarkable results from treatment by radical surgery, and have also had the opportunity to discuss the problem with other authorities. I hope, therefore, a discussion of the possibilities of treatment of bronchiogenic carcinoma, with special reference to Dr. Overholt's work, may be sufficient encouragement to make the early diagnosis of the disease in the out-patient department or practitioner's surgery as important as it is in the case of cancer of the breast or cervix uteri.

Correlation of Symptoms with Gross Pathology

If the gross pathology of bronchiogenic carcinoma is considered briefly, it is found that there are two main types:

1. Tumours arising in large bronchi, *i. e.* in one of the main stem or lobar bronchi or in one of the latter's primary divisions. 75% of the cases belong to this type.
2. Tumours arising in the small peripheral branches of the bronchial tree. These account for the remaining 25%.

In type 1, the growth at a very early stage projects into the bronchus without obstructing the free passage of air. The probable symptoms at this stage are therefore cough with production of frothy mucoid sputum due to bronchial irritation, and frequently hæmorrhage from ulceration of the growth. When the tumour becomes larger, thereby further narrowing the bronchus, a wheeze may sometimes be heard due to the air flowing back and forth past the constriction. Later the constriction may permit air to enter the lung distal to it during inspiratory bronchial dilatation, but prevent its exit due to the natural constriction which occurs during expiration, *i. e.* the growth acts as a ball-valve, and the lung distal to it exceeds its normal size due to hyper-inflation—a condition described as obstructive emphysema. This may be seen in a roentgenogram, and even better on fluoroscopy as it is associated with abnormal mediastinal movement. Finally, complete bronchial obstruction ensues. All the air in the lung distal to the growth is absorbed and this area is then atelectatic. If no infection occurs distal to the obstruction there is a simple accumulation of bronchial secretion, and later symptoms result from further spread of the tumour. Very frequently, however, infection leads to other changes, *e. g.* suppurative bronchiectasis (see Plate I), lung abscess or, by further spread of the infection, empyema. In these circumstances the symptoms of the growth itself are overshadowed by those of the septic complication.

In type 2, the peripherally-placed tumours, the growth is less likely to give rise to cough soon after its inception, as the cough reflex is absent in the small branch bronchi. Ulceration also usually occurs later than with tumours of the large bronchi, so that blood-streaked sputum or frank hæmoptysis infrequently bring the patient to the doctor early. Being in the periphery of the lung, obstruction with its septic complications does not arise, but spread to the pleural surface occurs much earlier and may result in a serous or hæmorrhagic pleural effusion. Secondary lung tumours are said to be "silent" as they rarely produce symptoms until very late. Primary peripheral tumours might reasonably be described as relatively silent.

From this outline of the gross pathology correlated with the symptoms, it is seen that cough, mucoid sputum and hæmoptysis occur early in growths near the hilum and later in those peripherally situated.

Four other symptoms common to both types frequently appear early—shortness of breath, discomfort or pain in the chest, loss of weight and loss of appetite. None of these have been adequately explained, for any or all of them may arise when the extent of the disease is apparently insufficient to warrant their appearance.

Method of Spread

Apart from spread by continuity, metastases in both types may take place through the lymphatic system or blood-stream. Briefly, the lymphatic vessels drain to the glands in the hilum of the lung, thence to the tracheo-bronchial glands of the mediastinum. Further spread may follow to the supra-clavicular, axillary or abdominal para-aortic glands. The peripheral type may also extend diffusely through the sub-pleural lymphatic vessels. Blood-borne metastases are particularly liable to appear in bones, brain, suprarenal glands and liver. Such metastases are said to occur earlier in association with peripherally-situated tumours.

Early Diagnosis

An early diagnosis must be made if an attempt at cure is going to be carried out. The possibility of making such may well be queried in view of the symptoms and signs being so variable and often trivial. The suggestion that an X-ray film of every patient who comes to a doctor with a cough should be obtained is generally declared impractical, just as it is impractical to carry out a barium enema examination on every patient with constipation. But it has always been taught that any unexplained alteration in the bowel action of a middle-aged person who has previously always been regular demands complete examination to exclude colonic carcinoma. Similarly, any middle-aged patient with a persistent unexplained cough who has previously not been so troubled requires full investigation to exclude the presence of a bronchial neoplasm, in addition to the customary examination for tuberculosis. A patient complaining of constipation and mucus and blood in the stools is directly comparable to one with cough, mucoid sputum and hæmoptysis in that carcinoma must be excluded. The excellent results of surgery in colonic cancer keep everyone engaged in clinical medicine alert to see that no case passes to the inoperable stage while under medical supervision. This is not true of bronchiogenic carcinoma. Yet it is now possible to offer a patient thus affected a chance of restoration to almost complete normality for an indeterminable length of time.

Confirmation of the Diagnosis

The symptoms and variable signs suggestive of bronchiogenic carcinoma have already been mentioned. Further investigation consists of a radiogram of the chest followed by bronchoscopy. If the growth cannot be seen with the bronchoscope, demonstration of bronchial obstruction by X-ray after the introduction of lipiodol into the trachea is highly suggestive of growth. But, whatever treatment is ultimately undertaken, it is most important to remove a portion of the growth so that the diagnosis may be made absolute and the exact histology determined. This can be done through the bronchoscope in about 75% of the cases. In the remaining 25%, sufficient growth for diagnosis and histological classification can often be obtained by aspiration through the chest-wall. This "aspiration biopsy" is fraught with numerous theoretical dangers, but has been found to be safe in practice if certain precautions are taken. If both these methods of proof fail and the case is otherwise operable (operability is discussed later), exploration may be justified if the diagnosis is highly suggestive, but it has to be admitted that, even with the chest widely open, it may be impossible to determine the nature of the lesion by simply looking at and palpating the lung. Lymphatic gland biopsy from the supraclavicular triangle or axilla is a possible method of histological verification of an inoperable case when bronchoscopy has failed to provide material for this. This is of definite value prior to commencing X-ray therapy.

Treatment

There are two main methods of treatment :

1. Excision either by removal of a whole lung or of one or more lobes.
2. Irradiation either by the local application of radium or radon seeds or by deep X-ray therapy.

In spite of a very occasional good result from the intrabronchial application of radon and the palliation obtained by deep X-ray therapy, excision at the present time is the treatment of choice in any operable case.

This statement necessitates a brief reference to the histology of bronchiogenic carcinoma. There are three main types—squamous-celled carcinoma, adenocarcinoma, and undifferentiated growths (the latter including the so-called oat-cell carcinoma). Early recurrence following removal of the last type has been experienced by some surgeons and, if these tumours are analogous to very cellular growths elsewhere in the body, it may prove that better results will be obtained by irradiation.

Determination of Operability

Operability has to be defined :

1. For lobectomy, the tumour must be peripherally placed and invisible with the bronchoscope.
2. For pneumonectomy, the growth must not encroach within 1 in. of the trachea.

In both cases metastases must be absent.

The history may suggest the presence of metastases, *e. g.* hoarseness due to involvement of the left recurrent laryngeal nerve, or skeletal pains due to osseous metastases. Physical examination is invaluable in the determination of operability, and careful search should be made for the presence of Horner's syndrome due to involvement of the sympathetic chain, supraclavicular or axillary glandular deposits, enlargement of the liver and palpable bone metastases. In addition to information obtainable from the chest roentgenogram, fluoroscopy may show diaphragmatic paralysis as a result of neoplastic infiltration of the phrenic nerve. If excision is to be attempted, bronchoscopy must show normally mobile vocal cords, a trachea and main

bronchi unfixed and a carina unwidened by glandular metastases. Many British authorities consider that a carcinoma visible through the bronchoscope is inoperable. This is untrue. Surgical excision has given the best results in cases of squamous-celled carcinoma of the large bronchi and, if the modern technique of total pneumonectomy is carried out, it is usual to remove the main bronchus to within 1 in. of the trachea.

The skull, pelvis, ribs, vertebræ and long bones should be examined radiologically to exclude osseous metastases.

If clinical examination and all special investigations reveal no barrier to operation, surgical exploration of the chest is indicated. About 40% of those explored up to the present time have shown mediastinal lymphatic deposits, and have necessitated closure of the chest and resort to X-ray treatment. If the case is operable, removal of the whole lung is necessary in most cases ; however, lobectomy is probably the correct treatment of those uncommon peripherally-placed tumours which are still operable. That such treatment may give at least a four-year "cure" is demonstrated by one of the late H. P. Nelson's patients, who had a lobectomy for carcinoma at the age of 61 and was perfectly free

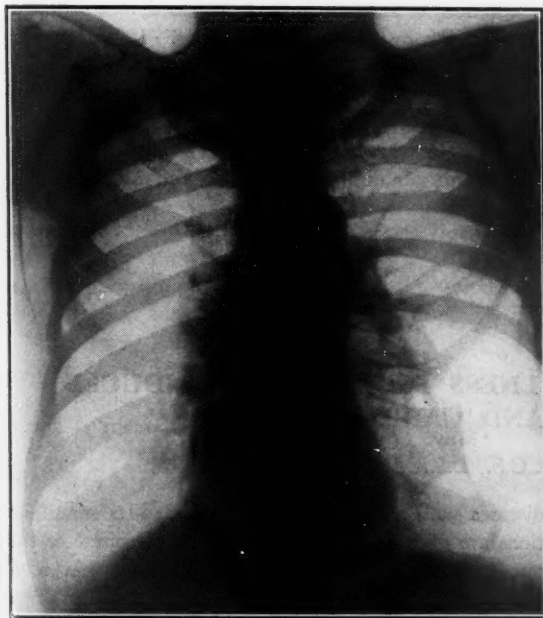


PLATE I.—Pre-operative chest radiogram of a male patient, æt. 51, suffering from a squamous-celled carcinoma of the right lower lobe bronchus. This bronchus was almost completely obstructed by the growth, resulting in partial atelectasis (evidence of which is shown by the shift of the heart and mediastinum to the right) and gross bronchiectasis distal to it. Clear areas (bronchiectatic spaces) surrounded by a zone of increased density were clearly visible in right lower zone in the original X-ray, but are difficult to distinguish in the reproduction.

§§

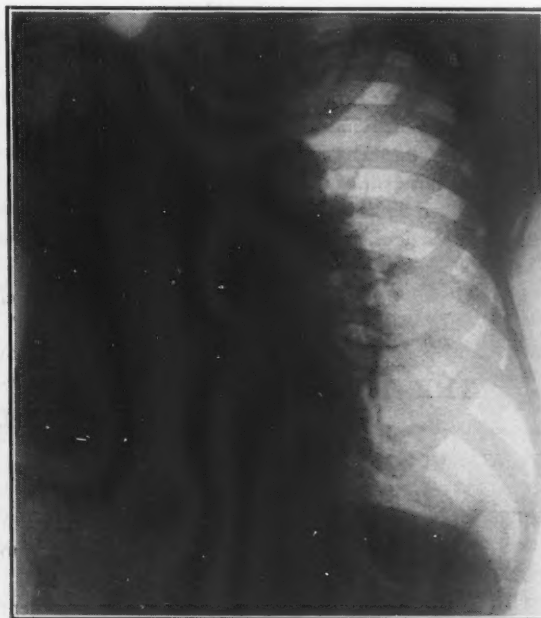


PLATE II.—Chest radiogram of same patient as Plate I, one month after operation. The diffuse density of the right hemithorax is caused by a sterile collection of serum and fibrin. The heart and mediastinum have shifted further to the right and the intercostal spaces are narrowed by contraction of the chest-wall. The position of the right hemidiaphragm is not distinguishable. Subsequent X-rays showed further mediastinal displacement and contraction of the chest-wall.

from evidence of recurrence in September, 1938, four years after operation.

With reference to removal of the whole lung, certain questions which arise from those unfamiliar with this form of treatment require answering, *e. g.* :

1. Is not the operative mortality in a patient of middle age or over prohibitive?

In Dr. Overholt's series (previously referred to) a whole lung has been removed for growth in fifteen cases; of these, only four have died within three months of operation; nine are surviving two months to four and three-quarter years since operation. These excellent results are apparently due to a combination of factors, some of the most important being:

(a) Anæsthesia providing adequate oxygenation (cyclopropane administered with 90% oxygen). Anoxæmia is avoided after operation by using an oxygen tent.

(b) Maintenance of the circulation with intravenous fluid and blood both during and after the operation.

(c) Avoiding interference with the mechanics of respiration by leaving the chest-wall almost intact, *i. e.* thoracoplasty is not combined with the operation.

(d) Obviating pleural infection by extremely careful asepsis and, most important of all, using a method of bronchial closure which, with few exceptions, remains permanent.

2. What happens to the undrained pleural space following removal of the lung?

The space diminishes in size from shift of the mediastinum towards the side operated on, contraction of the

chest-wall and rise of the diaphragm; thus reduced in size it fills with blood-stained serum, which later forms a mesh-work of fibrin enclosing sterile fluid in its meshes (see Plate II). In the rare cases when the space becomes infected, the patient may still get well following drainage and complete thoracoplasty.

3. What is the physical capacity of a patient of middle age in whom one lung has been removed?

Such a patient is capable of moderate exertion without causing dyspnoea, cyanosis or undue fatigue, *e. g.* a man is capable of carrying on a normal business life or a woman is able to run her home.

It may be that results comparable to those referred to are not possible in London, where the incidence of chronic bronchitis in middle-aged men is high, so that the risk of post-operative pulmonary complications and of contamination of the empty pleural space is increased. Nevertheless, it would seem that patients with bronchiogenic carcinoma should be investigated as to operability, and pneumonectomy or lobectomy performed if thoracic exploration shows there is a chance of cure.

With regard to deep X-ray therapy, there are still no satisfactory statistics on cases treated following histological proof and classification. If the effect of irradiation is to be accurately assessed, the histology should be known prior to treatment. If X-ray treatment is confined to inoperable cases, the chance of cure or great alleviation must necessarily be small. It would, however, be of considerable scientific value to carry out such treatment on a series of patients following biopsy, thus obtaining some idea of the radio-sensitivity of the various histological types.

THE TREATMENT OF MENTAL ILLNESS BY MEANS OF INDUCED HYPOGLYCÆMIA AND CARDIAZOL

By J. SAWLE THOMAS, M.R.C.S., L.R.C.P., D.P.M.

THE so-called "shock" treatments by means of insulin and cardiazol originated in Vienna and Buda-Pesth respectively.

In both cases the disease which it was aimed to cure or at least alleviate was schizophrenia. In choosing the title of this paper I have deliberately avoided the use of this term, as personal experience tends to show that the treatment is of equal, and it may possibly prove of greater value in the treatment of other forms of mental illness.

Schizophrenia itself is one of the most ill-defined

diseases with which we have to deal. Its manifestations are of so varied and changeable a character that one is impelled to ask whether schizophrenia is an entity at all.

Kraepelin distinguished the group of symptoms associated with this disease from those of the manic-depressive psychosis, and used the term "dementia præcox" to describe them. It was in 1911 that Bleuler drew attention to the inaccuracy of this term. He pointed out that dementia præcox is a misnomer, inasmuch as it does not invariably progress to dementia,

but may be arrested at any stage; neither does it always begin in early life. He coined the term "schizophrenia", and qualified it by saying that it would be better to speak of "the schizophrenias—a disease group almost analogous with the group of organic dementias". Nevertheless the group has certain symptoms and signs common to all its various manifestations. Among these perhaps the most important and characteristic is a degree of mind disintegration with disharmony between mood and thought. Bleuler also stressed the disturbances of association, although others (Henderson and Gillespie) have attributed this to the primary affective disorder.

The fact remains that as many as 70% of the chronic patients in mental hospitals are suffering from some form of this disorder.

Its cause is unknown, and there is no proved pathology. A large number of treatments have sprung up and have been acclaimed; but unfortunately each have, with more or less rapidity, been shown to be unavailing.

Now, at last, we have a form of treatment which, if not a cure, does without doubt improve a substantial number of cases which have been labelled as "schizophrenia" in a manner quite strikingly more effective than anything else.

Insulin had been used in the treatment of mental illness for a number of years before Sakel originated his technique, which is now the generally accepted method. Other workers had stressed the dangers of allowing hypoglycæmic coma to develop; but M. Sakel, working at the Pötzl Clinic, Vienna, observed that it was after the occurrence of this hitherto dreaded complication that the best therapeutic results were achieved. He evolved a technique which aimed at producing deep hypoglycæmic coma, while at the same time reducing the dangers to a minimum.

Principles of treatment.—The essence of the treatment is to produce a state of profound hypoglycæmia. It should be mentioned here that recent work by Day and Niver in America has shown that the effects are produced not by the reduction of the sugar in the blood, but rather by its reduction in the cerebro-spinal fluid.

The dose of insulin is so arranged that symptoms of HGL* occur between the second and third insulin-hour, and that deep coma does not occur until four to four-and-a-half hours after the injection. The patient fasts from 6 p.m. the previous evening and the injection of insulin is given at 7 a.m. The treatment is interrupted by the administration of sugar at the appropriate time. As soon as the patient is awake, usually seven to twenty minutes after giving the sugar, he gets up,

changes into dry clothes and goes to his normal mid-day meal.

The treatment is conveniently divided into four phases (Sakel):

Phase I: Preparation.

„ II: Hypoglycæmia ("shock").

„ III: Period of rest.

„ IV: Termination of treatment.

I. *The preparatory phase.*—This phase usually lasts from seven to twenty-one days. It is usual to begin with a dose of 20 units of insulin. A larger initial dose may have serious consequences. It is believed that the organism adapts itself gradually to the higher doses, and an original high dose might easily cause death.

During this phase no very pronounced signs are observed. As the dose is increased the patient may become a little euphoric, and later he may be drowsy. Until so-called "shock" symptoms occur sugar is given three hours after the injection. The patient being awake, he is able to drink it quite normally. It is customary to give about 200 grm. of either glucose or sucrose dissolved in water.

During this phase the dose of insulin is increased daily by 10 units until symptoms of HGL appear. Once these are established he is said to have entered upon Phase II.

II. *Hypoglycæmia.*—This phase is divided into five stages: (1) Incubation. (2) Presomnolence. (3) Somnolence—sopor—coma. (4) Interruption. (5) Finish.

(1) Incubation: This is the stage immediately following the injection of insulin. There are no recognizable symptoms; it usually lasts half to one hour.

(2) Presomnolence: During this stage there may be interesting changes in the psychotic symptoms. If the patient is hallucinated "the voices" become quieter and pleasanter. There is often a vague excitement and feeling of well-being. Somatic changes are not marked; but sweating may begin and rapidly become very profuse, so that the mattress is soaked through. This stage frequently ends in a state of more acute excitement with extreme over-activity. The usual duration of this stage is about two hours.

(3) Somnolence—sopor—coma: The preceding stage is followed by a period of quiet, and the patient sleeps peacefully. Quite suddenly, however, he may become extremely restless, noisy, and exhibit violent spasms of the muscles and limbs alternating with jerky myoclonic movements. The breathing may be heavy and stertorous; he may shout and cry out, and throw himself wildly about the bed. He is now virtually unconscious and his attention cannot be attracted. He then once more relapses into deep sleep and finally into coma.

(4) Interruption: After 4½–5 hours, or earlier if

* HGL = Hypoglycæmia.

the condition of the patient warrants it, sugar is given. A nasal tube is passed, a small quantity of stomach contents aspirated and tested with litmus paper (in order to verify the position of the tube) and the sugar solution is poured into the stomach through a funnel. In cases of emergency, and in some cases for therapeutic reasons, sugar is given intravenously. In the latter case 80-100 c.c. of 33% glucose are given. Usually when this procedure is adopted the patient is fully awake before the injection is completed.

(5) Finish: The patient being now awake, he is immediately given a drink of sugared tea together with a large slice of bread and butter. He then gets out of bed, changes his clothers, which are usually soaked with perspiration, and is able to resume his normal activities.

III. *Period of rest.*—In all early cases and in most others it is customary to give the treatment daily for six days and omit it on the seventh (usually Sundays). This day of rest constitutes the third phase.

IV. *Termination of treatment.*—The course of treatment is terminated when the patient is deemed to have recovered, or after 60 to 80 "shocks". The termination is effected by rapidly reducing the doses of insulin for a period of from four to eight days.

Complications are, fortunately, comparatively uncommon, and in my opinion the dangers of the treatment have been somewhat exaggerated. Considerable experience of the various manifestations which appear during HGL is necessary both for the doctors and the nurses in attendance; but once this experience has been gained, and provided that the nurses are reasonably competent, it should not be necessary for the doctor to remain continually in the insulin ward so long as he can be summoned and be certain of arriving within two minutes.

Among the more serious complications which may arise are acute pulmonary oedema, laryngeal spasm and myocardial damage. Epileptiform fits occur quite frequently and are not of serious significance. It has been thought that they were of definite therapeutic value, but I have seen nothing to confirm this view. One of my cases, who had 11 fits and would have had many more had not the coma been interrupted when signs of an approaching fit were seen, has failed to show any improvement. Another case who had 7 fits and 73 comas was also unsuccessful. On the other hand complete remissions have been obtained in two cases who only had 1 fit each.

Cardiazol.—The use of this substance in the treatment of schizophrenia was originated by von Meduna in Buda-Pesth. He conceived the idea that there was a fundamental antagonism between epilepsy and schizophrenia, and strove to find a substance which would

produce convulsions. After experimenting with various camphor derivatives he finally selected cardiazol as being the most suitable.

The technique of this treatment is much simpler than that of insulin and it has been very widely adopted. Many workers are using the combined method of insulin and cardiazol known as "summation". With this method cardiazol is given during the somnolent stage of HGL, and when the effects have subsided the HGL is interrupted.

Cardiazol is given by intravenous injection.

It is usual to begin with a dose 3-5 c.c. of a 10% solution. The injection must be given as rapidly as possible into a large vein. If it is given slowly or intermittently no effect is produced. Within about half a minute of the injection a violent epileptiform convulsion takes place lasting about two minutes. Shortly afterwards the patient wakes up and shows no ill-effects.

Complications are rare. Occasionally the period of apnoea following the convulsion is prolonged and requires the administration of artificial respiration. In some recorded cases fractures have been produced, and dislocation of the jaw is stated to be not uncommon.

In spite of the claims made by the advocates of "summation" treatment, I am of the opinion that certain types of illness do better with insulin, others respond more satisfactorily to cardiazol, and this view has been borne out by experience, although on an admittedly small number of cases. It seems to me that those cases which have done well with "summation" after having failed to respond to ordinary insulin treatment might have done equally well if treated with cardiazol alone from the beginning.

It is hoped at a later date to elaborate these views and to record illustrative cases from a series, some of which are still under treatment at the Bucks Mental Hospital.

It has not been possible in the space of this paper to give anything more than a brief outline of these treatments, but detailed accounts have already been written by many workers, notably in this country by Wilson (1937), James, Freudenberg and Cannon (1937) and, on cardiazol, by Cook (1938). In addition an admirable historical survey has been published by Wortis in America.

Apart from the undoubted therapeutic value in certain forms of schizophrenia, a wide field of research has been opened up in the realms of neuro-physiology and bio-chemistry, which may lead to further great advances in the diagnosis and treatment of this and other forms of mental illness.

In conclusion it gives me great pleasure to have this opportunity of recording my gratitude to Prof. Pözl

for permitting me to study these treatments at his Clinic, and also to Dr. K. Th. Dussik for his infinite patience and kindness to me during my visit to Vienna.

REFERENCES.

- BLEULER, E.—*Text-Book of Psychiatry*, 1934.
 COOK, L. C.—*Proc. Roy. Soc. Med.*, April, 1938, xxxi, p. 567.
 DAY, G. W., and NIVER, E. O.—*Texas State Journ. Med.*, 1937, xxxiii, pp. 236-42.
 JAMES, G. W. B., FREUDENBERG, R., and CANNON, A. T.—*Lancet*, May 8th, 1937, p. 1101.
 JAMES, G. W. B., FREUDENBERG, R., and Cannon, A. T.—*Proc. Roy. Soc. Med.*, April, 1938, xxxi, p. 578.
 MEDUNA, L.—*Die Konvulsion-therapie der Schizophrenie*, Berlin, 1937.
 PULLAR STRECKER, H.—*Lancet*, February 12th, 1938, p. 371.
 SAKEL, M.—*Journ. Nerv. and Ment. Dis.*, May, 1937, lxxxv.
 WILSON, I. G. H.—*Study of Hypoglycæmic Shock Treatment in Schizophrenia*, London, His Majesty's Stationery Office, 1937.
 WORTIS, S. B.—*Journ. Nerv. and Ment. Dis.*, 1937, lxxxv, p. 581.

A BEDOUIN PRACTICE

By S. AVERY JONES, M.R.C.S., L.R.C.P.

WHEN I qualified I felt that a life of too great security would not agree with me. Therefore when I was offered the work of organizing a mobile medical unit in the Transjordan Desert I accepted with alacrity. This unit was to be organized as a result of the recommendations of Dr. N. M. MacLennan, who did a thorough medical survey of the tribes in 1934.

It was to be pioneer work, as the Bedouin have become law-abiding only in comparatively recent years, and an organized medical service among them had not previously been attempted.

I was promised a mobile dispensary with a driver and four trained Arab orderlies, with tents and equipment. With this outfit I was to treat as best I could the nomadic tribes. There were preliminaries: for three months I battered my head against the gates of learning that concealed the Arab tongue. I then left for the desert, sore but full of enthusiasm.

I arrived in Jerusalem about the end of 1936 and was rather disconcerted to find, despite the newspapers, an apparently normal town going placidly about its business. I was mightily troubled by finding that my knowledge of Arabic—as it is spoken—was minute.

My dispensary car was still under construction by the Public Works Department and I was able to plan much of its interior, which was then most neatly executed by their chief Arab carpenter, who is rather a genius. I also chose my equipment, and later went to Transjordan to get some idea of the conditions under which I should have to work.

A full gale of icy wind mixed with rain and sleet was

blowing when I reached Amman, the capital of the country, and I hastily readjusted my ideas of a hot and waterless climate. When the tracks were passable I accompanied Major Glubb, the C.O. of the Desert Patrol, on one of his tours of inspection of the Desert Patrol Posts in the Northern Desert. This Desert Patrol is manned by picked Bedouin, lean, hard, natural fighters, yet possessed of such courtesy that in their presence one felt oneself back in the days of chivalry. I studied them with interest, as I was to be their medical officer in my spare time. Their uniform is picturesque: a long khaki robe with a scarlet sash from which swing gold and scarlet tassels; a cartridge belt across the chest is worn, and a dagger in a beautifully patterned metal sheath studded with semi-precious stones is carried; no man goes anywhere without his rifle. Sheepskin cloaks dyed bright red are worn against the cold and act as an auxiliary blanket. Their hair is worn long and braided and is concealed by their red and white headcloths; all are bearded.

These are the men that hold the desert forts strategically scattered throughout the desert. They do camel patrols, settle disputes and recover lost or stolen animals. Their work is more than that. With Major Glubb's assistance many have learnt to read and write, so the rapid assimilation of new ideas goes on and spreads among a backward race, while the best of the old traditions are rigidly maintained.

To return to my preliminary visit. We came across few Bedouin tents. The occupants were thin and poorly clad, and every group of tents produced a case or two of tuberculosis. I discovered that at this time of the year the majority of the tribes go to the warmer

east, many of them outside Transjordan. As there is drinking-water for themselves and their animals in the rain-pools, and now little danger of being raided, they have no need to congregate in any one area, and are, in fact, widely scattered throughout the eastern desert.

I found also that there were two main tribes that I would have to deal with—the Howeitat and the Beni Sekr, both of which receive honourable mention in Lawrence's *Seven Pillars of Wisdom*. Incidentally the fine portraits by Kennington in this book do full justice to the Bedouin, and it is rare to see in their faces the characteristics of ignobility, meanness and depravity too often to be found among townsfolk of any nationality. They have the proud bearing of a free race, and their warlike appearance is emphasized by the murderous-looking knife and the rifle and cartridge belts, without which they would feel undressed.

When friendly their courtesy is elaborate and their manners perfect, as is to be expected of a fighting people among whom an infringement of the laws of politeness has for generations meant a possible killing followed by a blood feud. To-day poverty is the predominating note among them, as their ancient occupations of raiding and extorting "protection money" from caravans and villages are no longer tolerated, and the inevitable encroachment of mechanized transport in the East makes the breeding of camels a less and less profitable business.

They have a high code of behaviour—much higher than appears to prevail in contemporary Europe. A woman can travel unmolested anywhere among them; a guest is a sacred charge to be protected with one's life if need be. Their war traditions are such that if a woman, child, sick person or old man were killed even by accident, the greatest shame would rest on those responsible—vanquished or conqueror. Much has been written about Bedouin hospitality—every tourist who

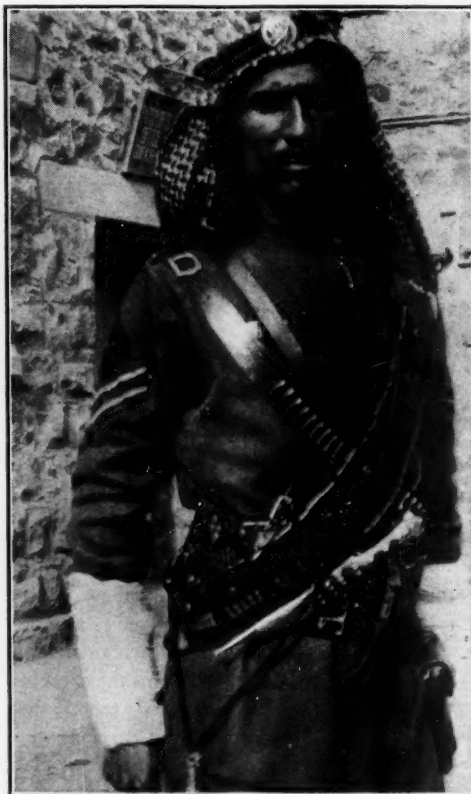
passes through the country seems to write a book about it—so I shall add but this: that the poorest among them, summing his worldly wealth in the possession of but one goat, would cheerfully kill that goat in order to provide a meal for his guest; in fact it is sometimes embarrassingly difficult to prevent this being done without causing mortal offence.

The Bedouin are a charming race, quite unreliable, fantastically generous and yet, given the prospect of money or personal advantage, of amazing avarice. They have been called lazy and unenterprising. This is shortsighted. They live on an amount of food that would starve an Englishman and have, therefore, to conserve their energy in everyday affairs. With an ideal in view they can draw upon great reserves of nervous energy.

My dispensary car took longer to make than I anticipated owing to the multiplicity of holidays in Jerusalem at the beginning of the year: Arab, Christian and Jew all get their time off at different periods, so that the work of the Government departments becomes held up. Finally it was ready and I took it to Amman.

Then began a period of intensive work arranging stores and packing the car. When this was nearly finished I set up a model clinic on the Arab Legion Parade

Ground and this was inspected by His Highness the Emir Abdullah of Transjordan, accompanied by the senior Government officials. I opened my first desert clinic on April 15th, 1937, 28 kilometres from Amman and among the Beni Sekr tribe. Before the tents were up we were inundated by patients, who arrived at the rate of 50 to 80 per day for several weeks. That was one of my most hectic periods. My stock medicines (concentrated 1:4) were put up in 1-litre bottles, and got used up so rapidly that I seemed always to be routing among boxes for the essential ingredients to make them up afresh. I then got 2½-litre bottles and used them, not without one or two restless nights



DESERT PATROL.

from the thought of the terrifying quantities of tinct. nux. vom. and liq. arsenicalis necessary to make up my mist. tonic in these amounts of a concentrated mixture. However, no irate people came to probe the question with their long knives and I soon regained confidence.

After three weeks the Bedouin moved and I shifted the clinic to follow them. It then seemed time to expand further, so I packed up what experience had proved necessary, and leaving my first clinic in charge of an orderly, went south with the car perilously loaded.

It is 200 kilometres from Amman to Ma'an, the chief southern town, and my destination was 100 kilometres further south at Rumm, a gigantic valley hemmed in by sheer sandstone cliffs and carpeted with soft sand. One road to Akaba from Ma'an runs through Wadi Rumm. In the centre of the valley floor is a fort, which by its nature and setting conjures up memories of old novels in the *Beau Geste* tradition. From high up one side of the wadi flows an unceasing spring of ice-cold water, dropping into an ancient trough fashioned by the Nabateans. Dragonflies abound, and vivid green moss and leaves almost hurt an eye attuned to the monotonous glare of the desert. Beneath, an unexcavated Nabatean town lies buried in the sand.

Here I stayed only twenty days. During part of this time I toured the southern Desert Patrol Posts examining the men. As there were few tents and less sick in the neighbourhood of Rumm I moved the clinic again, this time to the high land about 30 kilometres from Ma'an in a region where there were many of the Howeitat, and later to the wells of Jeffer. Here I spent some time in as near an approach to Hades as could be found in this life. Jeffer is set in the midst of a mud flat. The temperature in summer rises to about 115° in the tents at mid-day, putting my clinical thermometers out of action. There were whirlwinds carrying pillars of dust, and every patient arrived veiled by a swarm of flies. I had some typhoid cases to deal with and the Ma'an hospital was full, so I put bleaching powder in the wells and inoculated the local inhabitants, who complained bitterly thereat, and the cases stopped as the weather became cooler.

I found time to expand further, and established a third clinic in the South, this time in a beautiful little valley near Shobek. The tents of Hamd Ibn Jazi are near here, and his people come up for treatment. The clinic site is hard by a spring of clear water that wells up into a pond walled off to prevent pollution. There is even a patch of grass around the pond, as short and smooth and thick as a well-kept lawn. I kept a clinic there for four months in 1937 and again this year. Except in the winter, when I had two

clinics, I have maintained the number of clinics at three, but hope later to increase this.

The equipment of each clinic is as far as possible standardized. There is a bell tent for the orderly, a large clinic tent and a smaller white open tent to act as a shelter to patients awaiting treatment. The clinic tent has a cupboard 6 ft. tall, a long table to work from and a small table for the clinic register, etc.

Because of difficulties of transport I make up all my stock mixtures concentrated 1 : 4 in $2\frac{1}{2}$ -litre bottles. These are cumbersome to work with, so the orderly dispenses from 1-litre bottles and the large ones are kept as a reserve. I provide the following medicines : (1) M. tonic ; (2) M. protuss. sed. ; (3) M. hydrarg. c̄ pot. iod. ; (4) M. diaphoretic ; (5) M. bismuth ; (6) M. ferri et quinine ; (7) M. diuretic ; (8) M. dysmenorrhœa. Nos. 1, 2 and 4 are duplicated in the appropriate strength for infants, for whom a M. pot. cit. is also supplied. I also make up my own tinct. iodine, distilled water (I have a still), and eye drops of argento protein 5%, silver nitrate 1% in 15% glycerine, zinc sulphate 1% c̄ boric acid 3%, cocaine 2%, M. pig. mandl. for throats, "endrine"-type of nose-drops, and phenol 10% in glycerine for ears. We have tablets such as aspirin, calomel, grey powder, atebirin, plasmoguin, calcium sod. lactate c̄ vit. D, A.P.C., veramon, and I have recently issued sulpho-namide-p for use in urgent cases.

There are also dressings such as lint, cotton-wool, gauze, etc. Ointments include ung. zinc, ung. iodoform, ung. hyd. ammon. dil., ung. hyd. oxid. flav., ung. acidi borici and ung. streptocide. The equipment includes items such as spirit ammoniæ aromaticus, anti-snake-bite serum, copper sulphate sticks, eye ointments, oil of chenopodium, liq. adrenalin, kaolin, soap, etc.

My difficulties as a dispenser were at first tremendous, and even now are not small. I had tins made to take such solid ingredients as was possible, and a box made to take the tins. My tinctures I get in concentrated form to save space, and make them up with the appropriate dilutions of alcohol as I go along. Transport of bottles provided a problem ; this I solved by having special boxes made to take them, and so as not to have all the eggs in one basket I use a number of small bottles for transport rather than a few large ones. In this way breakages are few and, when they occur, are unimportant.

I now arrange my supplies so that I can make up most of my stock medicines at one time. I then take off an afternoon and evening, get out my collapsible weighing machine, unpack the boxes and get down

to it. I make a special point of never allowing these supplies to become exhausted, as it is demoralizing for the orderlies to have to see cases without being able to give the appropriate treatment.

This question of morale is an important one in work of this kind and is worth a lot of thought. My staff comprises four Arab orderlies trained in Palestine and Transjordan and a Circassian driver. I have found them loyal, hard-working and intelligent. They all come from towns or villages in Transjordan, and in their previous work could count on regular hours and Fridays off. In the desert regular hours are impossible, as the Bedouin have no sense of time and may have to journey long distances to reach a clinic, so must be seen when they arrive. None of the orderlies speaks English but the driver does, and when I first began he was in considerable demand as an interpreter. I never give the orderlies work that they feel I would not do myself and at the least complaint I do it—which they cannot bear.

The Bedouin have many curious notions about medicine, one of the more dangerous ones being "the more the better". I have never had a fatality from this yet, but why not is a mystery, as in spite of warnings I get bottles returned empty very much too soon for my peace of mind. In some cases of course the whole family has had a pull. In others, the patient has taken one dose, disliked the taste, poured the rest away, and returned, loudly protesting that the medicine had done no good and demanding a better one. A popular idea is that the doctor always really knows a cure, and if his treatment is not immediately successful it is because he is wilfully withholding the correct medicine. This is the most irritating and dangerous attitude to encounter.

They are very fond of laying on a red-hot iron as treatment, and some cases arrive scarred from head to foot and with large suppurating areas as a result. The skin is usually burnt over the site of the pain and often may have the desired counter-irritant effect, but the use of the cautery is an art, and the knowing experimentalist is quite likely to burn in the region of the elbow to cure a cough. The burns vary from second to third degree in severity, and may be single or multiple, patched or linear, and from $\frac{1}{4}$ in. to 8 in. long. It is not easy to palpate an abdomen mutilated in this fashion.

Another drastic measure, less common, is to thread a piece of very dirty string (using a blunt and equally dirty needle) through skin and muscle at the site of affliction. The string is left in, and the subsequent suppuration regarded as a good thing.

Aromatic plants abound in the desert, and the

Bedouin make infusions from them which are said to be good for the belly-ache and divers other troubles. I have not had the opportunity of testing their actions, but they are probably carminatives. Some plants are used to make a substitute for tea. This I have often drunk and found refreshing and stimulating; I think it may contain caffeine. Wild colocynth grows freely, especially in the south, and is used as a purgative, with dire and occasionally fatal results.

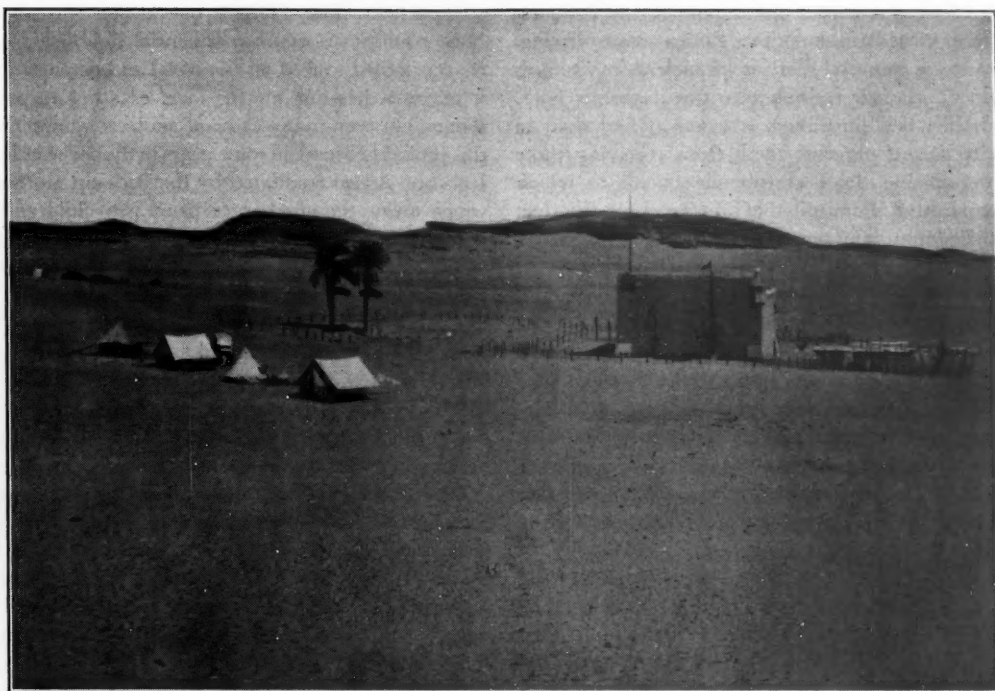
I seldom see cases of fractures, as the treatment of these is more or less a monopoly of certain families. In the cases of broken arms or Colles's fractures the results are fairly good; with broken legs any treatment is rendered of little value owing to the attitude of the Bedouin patient who, if he has strength to get about, will do so, and will on no account lie up for sufficient time for callus formation to become firm.

I have never yet been called in for a case of childbirth, nor for a case of puerperal sepsis. Delivery is the prerogative of old women, and it is probable that if anything went wrong, the patient would be dying or dead before the relatives would think of sending for a doctor, even supposing they could overcome their traditional modesty.

The Bedouin women are not as secluded as the Muslim women in the towns, and come up freely for treatment. I have no difficulty even in examining the abdomen, though any vaginal examination is impossible. From the gynaecological aspect their troubles are few, and owing to the abundance of sunlight and fresh air, and to the camels' and goats' milk which they drink in large quantities in the winter and spring months, rickets is unknown. Dysmenorrhœa is occasionally complained of, as Bedouin women have no false modesty about speaking of menstruation.

Climatically the country is very favourable to good health. Most of the desert forms the top of a vast plateau, the high altitude giving comparatively cool nights even in the hottest weather. Although the heat is extreme at times in summer, it is not unbearable owing to the dryness of the air. The winter is short and very cold, but during this time many of the Bedouin go outside the country to the warmer east.

The most prevalent diseases are largely the result of economic conditions combined with medieval ideas regarding sanitation and personal hygiene. Where sufficient water is available the men usually take the opportunity of washing themselves and sometimes even their clothes, but water is scarce and soap scarcer, and they are all louse-ridden. Owing to lack of privacy and for reasons of modesty the women find it more difficult to wash their bodies, and the older ones especially are often very dirty.



CLINIC CAMP AT MUDOWARA.

In summer the temperature here rises to about 130° in the shade.



OUT-PATIENT DEPARTMENT.

Tuberculosis is a serious disease among the Bedouin, and in its surgical form sometimes causes great suffering. They live on a minimal diet very deficient in vitamins A, B and C, so their resistance to this disease is poor, and their life, healthy though it seems at first sight to be, by its nature prevents them from receiving those small immunizing doses of tubercle bacilli to which the comparative immunity of townspeople is due. Thus a Bedouin may go for many months without contact with tubercle bacilli, until a day when he drinks from the same coffee-cup, and talks in close proximity to a person spitting up blood and thousands of the bacilli every minute.

Syphilis is quite common, but appears to occur in a very mild form without nervous or arterial complications, although the nasal arch is sometimes destroyed and bone lesions are not infrequent. The infection appears to be carried on by intermarriages between infected and healthy families, and possibly by the habit of drinking from the communal coffee-cup. It is very difficult to treat efficiently, as it is often impossible for the Bedouin to remain in any fixed place for a sufficient length of time. Moreover, although they realize the great value of injections for the disease, as soon as any benefit appears they will immediately cease treatment if it causes them the least inconvenience to continue with it. I have had people come to me saying with a charming smile that they had syphilis, and would I please give them a needle for it. On being told that it would be necessary for them to return for further injections, they would say, "Oh no, I can't possibly do that, as I am moving with my family to the Hedjaz to-morrow".

It is difficult to see why true scurvy is not more prevalent among the Bedouin, particularly towards the end of the summer months, as their diet appears in many cases to be absolutely deficient in vitamin C. Sub-scorbutic symptoms are common, however, in the form of spongy bleeding gums, though true scurvy is rarer than might be expected. Anæmia is very frequent at this time of the year, and I get many cases complaining of neuritic symptoms. These clear up rapidly when treated with an iron tonic and a vitamin preparation.

Their teeth are magnificent, and I think this is due to the amount of milk drunk at some seasons. Pyorrhœa however is frequent in those of middle and old age, and is attributable to the unhealthy condition of the gums due to lack of vitamin C.

Trachoma is very common, nearly all the children being affected. In many cases, however, spontaneous cure seems to take place before the middle twenties. The children's faces are filthy, and in the summer are

covered with flies. This is one reason why the fly in these countries is such a pestilential nuisance; since it is accustomed to feed on the nasal and ocular secretions it makes a bee-line for the face. Rather surprisingly, I have not seen many cases of acute conjunctivitis, but this probably occurs in some years in fly-borne epidemics. Infection is also facilitated by the Bedouin mother, who wipes away the discharges from her children's faces indiscriminately on her sleeve or the hem of her dress.

Typhus and typhoid occur sporadically, and there is considerable danger in a population such as this, which lives on the borderline dividing sufficient nutrition from starvation, that in a bad year with poor crops and loss of cattle lowered resistance would permit widespread epidemics. The past two years, however, have been good ones with abundant winter rains, so that the health of the Bedouin is now above the ordinary level.

Control of such epidemics and the prevention of their spread into Palestine is one of the main reasons for my existence in the desert. However, it is by no means easy to get the Bedouin to submit to inoculation against such infections as typhoid, for, although they come to me demanding needles for every complaint, their automatic reaction to any enforced measure is one of suspicion. In fact it would be difficult to find any people more apt to cut off their own noses to spite their own faces than the Bedouin. A sheikh, for example, who considers himself annoyed will refuse to allow his people to come to the clinic until he has been mollified, even although some of them may be in urgent need of treatment.

Smallpox is now very rare in this country, although common in the adjacent land of Saudi Arabia. This is due to the very efficient measures that have been taken by the Health Department of Transjordan. For many years past orderlies have been sent out to vaccinate all children and others who have not yet been done. Although they realize the value of this measure the Bedouin submit to it only after a good deal of protest, as the absence of the disease in this country has lulled them into a false sense of security. They still remember the days of variolation, however, and consider a newly vaccinated person dangerous. When one person has been done they are therefore more ready to bring up any other unvaccinated person. The absence of scarred faces among the Bedouin in Transjordan is remarkable, in contrast to the people from the Hedjaz, and it is in fact often possible to recognize a man from that territory by his pitted skin.

Skin diseases are also rare, with the exception of impetigo, which is very common among children, and of sweat rashes and occasional eczema. Ringworm and scabies are very uncommon.

The Jordan Valley is intensely malarial, and many of the Beni Sekr become infected there. The village of Azrak, also, which is surrounded by a marsh, is a source of infection. The quartan form of malaria is uncommon, and sub-tertian and benign tertian make up the majority of cases. I treat this disease with a course of atebirin followed by a course of plasmoguin, and finish off with M. ferri et quinini.

Bilharzia is occasionally found among the Howeitat, but is always picked up outside this country. I have not seen a case of kala-azar.

Scorpions are found everywhere in the desert and the Bedouin are often stung. Though I have seen cases showing considerable shock with a slow pulse, a perspiring cold skin and vomiting, I have never yet heard of a death from this cause, except in young children. Incidentally we are frequently killing these pests in our own tents, and I am probably one of the few practitioners who has found a scorpion nestling coyly among his pillboxes. They seldom reach a size above two inches long, and two varieties are known, the white and the black, of which the black is supposed to be more venomous.

There are also snakes, though these are rather retiring, and I myself have only seen three since I have been in the country. The small yellow sand-vipers have the worst reputation, and are known as "the father of going sideways" owing to their peculiar mode of progression. The Bedouin are rarely bitten by snakes, not at least when in my neighbourhood, and that in spite of the fact many of them go bare-footed, and when travelling they park down for the night anywhere on the ground.

The technical obstacles in this work are imposing, and at first, when I had only the dispensary car for transport, were almost insurmountable. This car has a

six-wheeled, three-ton Ford truck chassis, and while its special body makes an excellent laboratory, office and store, it has not the bottle-space and accessibility necessary for clinic work. It is also too slow and heavy for touring over rough country to the tents, and for the transport of clinics it was often necessary to make double journeys with the car filled nearly to the

roof, and an orderly sprawling uncomfortably on top of the boxes and equipment as we jolted, swayed and bumped over rough and sandy tracks through an inferno of heat and dust.

I remember runs like this when on journeys of 230 kilometres or more we had to stop and mend from two to four punctures, and anyone who has had to take off the wheels and mend the tyres of such cars similarly loaded will realize what heart-breaking work it is.

Thus it was soon obvious that a second light and more mobile car was required, and I was forced to buy one. The type I chose was a Ford V-8 $\frac{1}{2}$ -ton pick-up, which I run with the help of a Government kilometer allowance. This car, which looks at first sight like a farmer's milk van, I have found very useful. Being light-bodied but with a powerful engine, it is capable of going up and down hills that appear almost as steep as walls, and over country strewn

with stones and cut through by innumerable small wadis.

The desert in this country is by no means confined to the rolling sand-dunes so often seen in picture post cards, though these occur in places. It comprises also volcanic rock-strewn country impassable except on cleared tracks, bare mud-flats extending as far as the eye can see, gravel-strewn country, flint-covered rolling hills and mountainous areas with magnificent scenery. South of Ma'an is the most picturesque desert of sand and mountain type, particularly on the



BEDOUIN TREATMENT.

A case of malaria showing "treatment burns" and seton threaded through abdominal wall.

routes to Akaba and Mudowara, and near Shobek. At Mudowara is an ancient Turkish fort now occupied by the Desert Patrol. It is the site of the last station in Transjordan on the erstwhile railway to Medina. I had a clinic there in March of this year, to examine the pilgrims returning overland from Mecca. From Ma'an to Mudowara the track follows the railway, which is in the same state as it was left at the end of the war, with culverts blown up and stations wrecked.

unit to be as self-contained as possible. The distances to be covered may be illustrated by the fact that a round of my clinics at the moment would cover 350 miles, and at other times may be much more. It is difficult to keep to any fixed schedule, since if there is an infectious disease in a locality I am bound to stay there until it is over. Otherwise I try to stay about a month at each clinic, taking them in rotation, and moving them to correspond with tribal migration. I



DEPIGMENTATION.
Origin probably syphilitic.

My transport difficulties, which I had hoped were solved, were again in evidence towards the end of last year when, owing to a burst tyre, my pick-up crashed in the desert near Jeffer. I was driving at 80 kilometres an hour and the car turned over three times, so its repairs were a lengthy undertaking and necessitated my leaving the wreck in Jerusalem. I did not get it back until June of this year. This prevented me from carrying out my plan to establish a winter clinic in Jebel Toubaik, far away down in the south-eastern corner of the country and two days' journey by car from Ma'an. To this place, which I have heard is beautiful, go many of the Howeitat in the winter months, as, given rain, the grazing is excellent and the weather mild. I expect, however, to go there this winter.

Working as I do far from a base it is necessary for the

also visit all the Desert Patrol posts twice a year in order to examine the men.

Much of my laboratory work I do myself, usually in the evenings. I am provided with a very fine Leitz binocular microscope and have good laboratory equipment, including a centrifuge. For illumination when using the microscope I find a paraffin pressure lamp satisfactory.

My greatest bugbear in the past was official reports and letters, which I had to do in my own hand. For many months I kept my files in a suitcase, and although I ultimately had boxes made for them, the carpenter got his measurements wrong and they had to be returned for another long period before they could be used. In April of this year when on leave I married, and my wife, who lives with me in the desert, has now taken all such things in hand and has wrought miraculous

changes. All my correspondence is now typed—a beautiful arrangement for me if not for her—and she has put my astonished files in order.

We are rather cut off from civilization in this work and have not even a wireless set to keep our nerves on edge. Often we are out of touch with European news for weeks at a time. For the last three and a-half months, with the exception of three nights in Amman, we have slept in our tent in the desert, only going in for occasional day trips to take patients into Amman Hospital or to get stores.

It is not, however, an existence we would change, as the desert has its own great compensations, not least of which is the keener sense of enjoyment in small things that would pass unnoticed in a town, as the taste of water, a breeze scented by passage over aromatic shrubs, or the golden evening glow that settles over the plains and makes even a whirling dust column a thing of beauty.

THE FIRES OF SMITHFIELD

By P. W. ISAAC.

THE burning of heretics was first introduced into England about the year 1390, when a Lateran decree ordering their extirpation was adopted. The writ was issued under the well-known title, "De heretico comburendo".

Smithfield, being conveniently near Newgate, was the scene of some sixty-six martyrdoms. Those burnt were, with several notable exceptions, of the artisan class. They included among them cutlers and cobblers, tailors and tallow-chandlers, men and women. They were tried by ecclesiastical courts and then handed over to the secular authority. Their heresies included criticism of the Mass, possessing copies of the Bible in English, and teaching the Lord's Prayer in English.

The first man to be burnt at Smithfield was one Thomas Badly, by trade a tailor. Great efforts were made to make him recant. He had two trials, one before the Bishop of Worcester, and one before the Archbishop of Canterbury; tied to the stake, the Chancellor of Oxford preached to him, and the eldest son of the King admonished him. The Prior of St. Bartholomew's, having approached in seemly procession, questioned him once more and the fire was applied, only to be extinguished by order of the Prince. Even this failed to dismay the tailor, and the fire was relit.

Distinguished sons of Oxford, such as Ridley and Latimer, were burnt in their home town, close to Balliol. Smithfield, however, was the scene of the death of at least three Cambridge men. Among those who condemned the first of these was a Dr. Barnes, who soon

afterwards himself preached a reformed sermon at Trinity Hall. This caused no small stir both in the Senate House and also at "a house to which they chiefly resorted—the White Horse Inn—which, in contempt, was called Germany! This house was chosen because many of them of St. John's, the King's College and the Queen's College were able to enter at the back gate". The Proctors arrived to find their bird flown to London, where he was hailed before Cardinal Wolsey and so to Smithfield.

John Rogers and John Bradford were both Cambridge men and prebendaries of St. Paul's. The latter was also a Fellow of Pembroke.

There is no doubt that burning at the stake was an exceedingly cruel death. The accounts contain indications that death was often delayed because the wood was green, or because those responsible wished to give the heretic another chance. The victim was not apparently bound, but secured to the stake by a chain. Several are said to have held their hands in the flames for some time.

In most cases death from shock and to a lesser extent asphyxia was probably not long delayed. Sometimes gunpowder was placed around the stake to shorten the agony. On one occasion this disturbed the onlookers much more than the victim at the stake. A well-born and educated woman, Anne Askew by name, having been racked by the Lord Chancellor himself in the Tower (because the Lieutenant, Sir Anthony Knevet, refused to order the gaoler to do so), was being burnt before a distinguished company. These worthies, who were seated along the wall of St. Bartholomew's Church, included the Lord Chancellor, the Duke of Norfolk, the Earl of Bedford, and the Lord Mayor. Hearing that gunpowder was to be used they expressed fear for their own safety. Reassured by the Earl, the Lord Mayor pronounced "fiat justitia" and all passed off safely.

A search of the Hospital records of this period has revealed no reference to these events. The clerk was, to be sure, most distraught and upset the day following the burning of five heretics, if one may infer such from a much blotted and corrected entry.

Likewise it is not easy to ascribe any direct connection between them and the second foundation of the Hospital. It is, however, certain that these men died in the fight for that freedom of thought and conscience which is ours to-day.

Clinically this was a time when the modern science of medicine was born. Linacre and Harvey were of this and the following generation. A modern touch is found in a contemporary entry in the Hospital records, well enough suited to end this account of death by burning: An order for the erection of a shed for the use of patients "for swetyng in"!

A CASE OF METROPATHIA HÆMORRHAGICA

By JOHN GLUCKMAN.

EM., aged 30, commenced her catamenia, at the age of 15, with a cycle which varied between three and five weeks, and a duration of from four to ten days. At the age of 22 she had continuous hæmorrhage for three months, after which her cycle became regular until the age of 24, when, after five weeks' amenorrhœa, vaginal bleeding started and continued for six months.

The patient was then seen, in October, 1922, because an ectopic gestation had been suspected. A diagnosis of metropathia hæmorrhagica was made since the swelling on the left side of the uterus was a cystic ovary. She was admitted to hospital and her uterus was curetted. Microscopically the curettings showed the characteristic cystic glandular hyperplasia.

Following the curettage a normal cycle returned for a few months and then continuous hæmorrhage recommenced. In 1933 the patient was given injections of anterior-pituitary sex hormone, with the theoretical object of stimulating the ovaries to produce a corpus luteum.

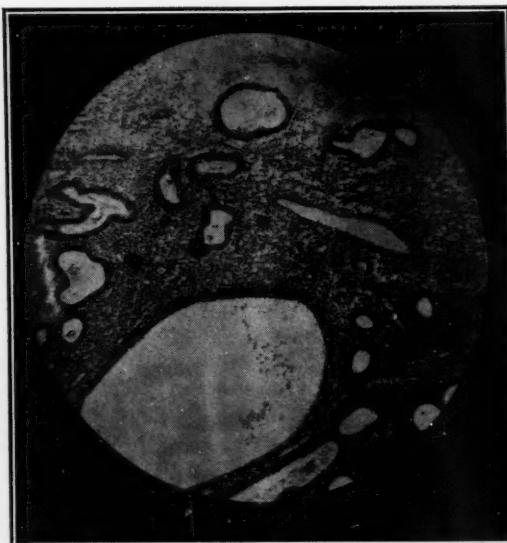
No relief followed. The creation of a temporary artificial menopause with radium or X-rays was considered, but the patient was advised to become pregnant, although it was felt that her chances of conception were not very good. However, in 1935, at the age of 27, she was delivered normally, but the bouts of continuous hæmorrhage recurred and another curettage was performed in March, 1936. At this time the cyst was palpated in the right ovary. The patient was then free from symptoms for six months and became pregnant a second time, being successfully delivered in July, 1937. The child was breast-fed for ten months, during which time the mother had amenorrhœa.

Since then her periods have been irregular, with a month's continuous bleeding in August, 1938. It was then decided to remove her uterus and, in September,

1938, subtotal hysterectomy was performed. The endometrium exhibited the characteristic appearances of the disease, and the cyst was found in the left ovary, whilst the other was small and atrophic.

Discussion

The case is reported to emphasize the characters of the disease. There is a history of continuous bleeding, preceded by a short period of amenorrhœa. The physical signs of a bulky uterus associated with a cystic ovary are present, and the diagnosis is confirmed by examination of the curettings. The endometrium is thickened and in parts hyperplastic; cystically dilated glands are found, and there are areas of necrosis in the superficial and middle layers. These endometrial peculiarities are associated with constant disturbances in ovarian function, which result in an inhibition either of the process of ovulation or of the full development of the corpus luteum. The follicle which is affected becomes



SECT ON OF THE ENDOMETRIUM IN THIS CASE, SHOWING CYSTIC GLANDULAR HYPERPLASIA AND SUPERFICIAL NECROSIS.

cystic and persists in the ovary. In this case the age of the patient is atypical in that the disease is but rarely encountered between the ages of 20 and 25. The maximum incidence is between 40 and 45.

This case presents some very interesting features. In the first instance, it is surprising that the patient conceived. Pregnancy is almost unknown in patients who have suffered from this disease. It is to be noted that pregnancy and lactation gave no permanent benefit, although the relief from the continuous bleeding must have been great. Then the case illustrates that the anterior pituitary sex hormones are of little value when the usual doses are given. In 1933 large doses at frequent intervals were given without any effect at all. Estrin also was given in that year with similar results.

It may be questioned why the patient was not treated

with progestin. But since this hormone has been available the patient was either pregnant or lactating, and during the last recurrence of the symptoms she was so disgusted with her uterus that she preferred surgical to conservative endocrine therapy. In any case it is doubtful whether progestin treatment in its present form is of much value in cases of this type.

Since Shaw published his classical survey of this subject in 1929 no further contribution of value has been made concerning its ætiology. It is difficult to understand why curettage should have produced even temporary alleviation of the symptoms, for this operation does not disturb the menstrual rhythm when performed in such cases as sterility and dysmenorrhœa. It seems that the most satisfactory hypotheses are to assume that the endometrium secretes a hormone which has some effect on ovarian activity, or that there is a quantitative or qualitative disturbance of the pituitary gonadotropic factors. Finally, one is loath to accept the view that the disease is determined by an over-production of œstrin, as

the œstrin content of the cyst fluid has been shown repeatedly to be very low. Very often the cyst is lined with flattened epithelium and, indeed, experience has shown that the longer the continuous bleeding has persisted the more atrophic do these epithelial cells become. Further, it can be shown that continued œstrin stimulates ovarian activity, whereas in this disease much of the ovarian tissue of the cyst is atrophic and shrunken.

I am indebted to Mr. Wilfred Shaw for permission to publish this case, and for his guidance in the preparation of this report.

Bibliography

SHAW, W.—*Journ. Obst. and Gyn. Brit. Emp.*, vol. xxxvi, No. 1.

SCHROEDER, R.—In Veit and Stockel, *Handb. d. Gynäk.* (1930).

LEPPER, PRATT, PRATT and VAUX.—*Lancet*, January 29th, 1938.

THREE UNLUCKY DEATHS

By G. L. A.

THE bodies of the following were brought to my mortuary (in Tropical Africa) within a short period :

1. A boy of ten was supposed to be working on a farm, but his master found him playing around, and attempted to beat him. The boy made off, and the man threw a small knife after him. It hit him on the back of the left thigh, and he died in a few minutes. At autopsy the superficial wound was little over half an inch long. The femoral artery had been partially divided.

2. A boy of sixteen was up a palm tree, holding on with his left hand, cutting nuts with a machete in his right. He missed a shot and hit himself in the bend of the left elbow. He fell down, but his screams were taken by people in a neighbouring house for those of children at play, and he bled to death. At autopsy the brachial artery was found to be partially divided.

3. A man of thirty was playing a drum at a funeral; he was seated, and the drum, made of skin stretched over a length of hollowed tree-trunk, was held between his knees. Illicit spirit, distilled from palm wine, stronger than gin and

very pure, is obtainable in these parts in unlimited quantities at a shilling a bottle, and all were very drunk. A member of a rival band went up to the drummer and stuck his penknife through the drum; it slipped and went deep into the right groin. He died,

OUR CANDID CAMERA



Standing Room Only.

they said, in about fifteen minutes. At autopsy the femoral vein was found to be partially divided.

In each case the vessel had been only partially divided. Not long after the last, a man was brought to hospital with his left hand cleanly severed through the carpus. About twelve hours previously he had been

attempting to break into a house, and the owner of it had dealt thus with him. Though nothing had been done to control bleeding, apart from wrapping it in dirty cloth, bleeding had entirely ceased when he was admitted, and he was not particularly exsanguinated.

CORRESPONDENCE

THE DOCTOR'S DRESS

To the Editor, 'St. Bartholomew's Hospital Journal'.

SIR,—May I assure Mr. Rowntree that I have tried very many types of collar, all of which have failed to prevent some measure of discomfort during hot weather, and further that I am not advocating bare chests, but merely the freeing of the neck from constricting bands.

I did not discuss the ethics of the question in my letter, because I did not wish to make the issue too large and vague. Since it has been raised, however, I should like to give my views thereon.

Fashions in dress have almost invariably been set by members of the affluent and titled classes who generally lead a fairly leisurely life. Whilst their clothing may suit them well it does not follow that it is suitable for those who do work in office or surgery. However, the exaggerated respect held by the middle classes for wealth and title induces them to ape the rich, and hence it becomes necessary for those desiring to be held in esteem to dress as noblemen do.

And with much bombast and wagging of fingers we are told "The apparel oft proclaims the man". How absurd! The apparel may indicate the personality, but surely not the character. The fundamental basis of conventional dress is seen to be snobbery, and hence interpretations of character based upon it are fallacious.

Consequent upon this conventionality people wear clothes which for the most part are unsuited to them. Furthermore those who, realizing this, wish to vary their dress according to the weather and not according to the fancy of the upper strata of society are not allowed to do so for fear of losing their jobs.

This state of affairs can only be changed if a body of people already commanding the respect of the public makes use of the power thus provided and of its knowledge to state publicly that it is up to each individual to dress himself comfortably, cleanly and tidily, and that the requirements of each will vary with his physical make-up (e.g. activity of the thyroid). Many might still wear ties in hot weather. On the other hand, those who would prefer some other dress would have leave to do as they pleased. Which is as it should be in a democratic country.

In conclusion, may I point out to Mr. Rowntree that it is customary to wear sensible clothing in warm countries, not because it is *de rigueur*, but because it is too hot for even the most pukka sahib to wear conventional English dress. The "*de rigueur*" comes galloping after.

Yours faithfully,

H. ISENBERG.

25, Mount Pleasant Lane,

Clapton, E. 5;

November 7th, 1938.

SAMUEL GEE AND CEDAR TREES

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—In the most recent issue of the *Hospital Reports*, viz., vol. lxxi, 1938, the publication of the Wix Prize of 1937 presents a most valuable account of the hospital career of that celebrated clinical teacher, Dr. Samuel Gee. I had the good fortune to attend his first course of Lectures on Morbid Anatomy, where he instilled into us the value of the post-mortems, which are still far too few, both in private as well as in hospital practice. One detail of his earlier teaching, expressed clearly in this essay, was his contempt for physiology. But I believe this might be traced to the very backward state of the text-books on physiology (for instance the earlier editions of Kirk's *Physiology*) previous to 1870. On the other hand, Quain and Sharpey's *Anatomy*, especially the section on histology, all gave greater help to those working, like Gee, at morbid anatomy. Gee was like Samuel Wilks in always being very simple and yet efficacious in his details of therapeutics.

Amongst his medical lectures is an address given to the Abernethian Society in 1903 on 'Abraham Cowley the Poet and

Physician'. One line in a letter written by Cowley in 1643 throws a valuable light on a point in historical arboriculture which has baffled many of those people interested in giant trees. Scattered through England and Scotland are many magnificent cedar of Lebanon trees. Many of these after careful inspection must be considered as of at least 600 or more years old. But it seems that up to the present time all the botanists, etc., quote Evelyn in his book on trees, *Sylva* (c. 1660), where he says he has just heard that seeds of the cedar of Lebanon tree have been introduced to England and so they can now be propagated, as the seeds appear to grow freely in this country. There were some cedar trees growing in Chelsea (The Physic Garden) at that time. But on p. 331 of the fourth edition of Gee's *Medical Lectures*, published in 1915, is part of a letter written by Cowley complaining that Covenanters had visited Cambridge University, where he was Fellow, but as he would not sign the covenant he writes, "I am torn from thence by that violent storm which suffers nothing to stand where it did, but rooted up every plant, even from the princely cedar to me the Hyssop". A great misfortune and financial loss, as Gee observes in his book. This letter of Cowley's was written twenty years before Evelyn's book, which shows that there must have been many princely cedar trees about for Cowley to be able to make use of that simile. Visiting Dryborough Abbey this summer in the north one could not but admire the grand cedar trees there, and it seems certain that those many cedar trees in and near churches and abbeys must have been brought home as small trees from the various Crusades in the twelfth and thirteenth century. These would tally with the great size of so many of the cedar trees scattered all over England. In the grounds of Atkinson Morley Convalescent Hospital (St. George's Hospital), on Copse Hill, Wimbledon, there are two such cedars, which must be quite a great age. A third tree there is known for certain as 100 years old, and in comparison the other two must be well over 500 years. Yours, etc.,

23, Lindisfarne Road,
West Wimbledon, S.W. 20;
October 28th, 1938.

J. K. BARTON.

CRANKS

To the Editor, 'St. Bartholomew's Hospital Journal'.

SIR,—Dr. Oldfield, in his letter in the *Journal* of last month, makes some comments which are both dogmatic and puzzling.

"No crank can ever expect to make a fortune." I am sure we all know of cranks—criminal lunatics would be a more correct term—who do make fortunes. The gentleman who treated a patient of mine, who had carcinoma of the lung, with hormone therapy, "in order to purify the blood", and who saw her every day for six weeks at five guineas a time!

Another gentleman, to whom a patient of mine, who had dementia præcox, was taken, told her that, as the hip was connected to the spine and the spine to the brain, he must X-ray her hip, which he did—and charged twenty-five guineas!

These cases can be multiplied many times, and as far as our profession is concerned it is the crank who will make more money, in many cases, than the sober practitioner.

Dr. Oldfield's final *bon mot* on "dress" is shattering. "*Such pioneering reform is not for women doctors.*" In Heaven's name, why?

They have already proceeded with it. Women's dress to-day is, in many respects, more comfortable, more hygienic and more attractive than men's—as even a fruitarian scientist will agree the next time he puts on a boiled shirt in midsummer!

Yours truly,

W. A. BELLAMY.

24, Silverdale,
S.E. 26;
November 8th, 1938.

SPORTS NEWS

EDITORIAL

Two years ago, at the Annual General Meeting of the Rugby Football Club, a rather vexed question was mooted back and forth for some time—the question of Wednesday fixtures. It may seem odd that this matter should crop up again in these columns, but it is being forced more and more upon our attention these days.

Briefly the difficulties are as follows: The Press practically only attend at our matches on Wednesdays, and on the form they see they assess our Club from their point of view. Now in consideration of the financial difficulties surrounding the Club our gates are all-important, and therefore the point of view of the Press is, *ipso facto*, just as important.

In view of these circumstances does it not seem a pity that we should meet sides which are not in the first flight on such days, and moreover meet them with scratch teams little better than second XV's? Should we play good sides and at least give them a game (and the elementary courtesy of a full side in opposition) it might well bring us back gates of the old Winchmore days.

The blame for this condition of affairs lies, not at the door of any individual, but at the door of the whole Club. There lies the cure also.

RUGBY October 29th *v.* Old Leysians. Won 16—0.

FOOTBALL *v.* Army Trial XV. Lost 8—31.

The Army brought a strong side to Chislehurst on Wednesday, November 2nd, certainly the strongest they have brought for some time. Unfortunately Bart's were weakened by the absence of Candler and Irving, who were supporting Middlesex, and Hall, who was away also.

In front of a host of Army selectors and others, Sergt. Ibbitson started the ball rolling at 3 p.m. in somewhat chilly, though fine

weather. The Army by no means had it their own way in the first half, and on the whole honours were even. Bart's were packing 3—4—1, a rather unwise move against what was to prove such a heavy pack of forwards.

The idea, one presumed, for this formation was to try to remedy the slow heeling which has been all too apparent in the previous games. Nevertheless we would prefer to see the problem tackled from a sounder and more basic angle, namely an attempt to form a more solid and combined scrummaging machine. One feels that with a little more practice than is obtainable on the actual afternoon of the game this would soon be achieved. Nevertheless Moynagh, with that rare skill of his, though getting less shove in the tight, contrived to manœuvre the ball into the ever-ready hands of Hearn, who played his usual sound game. His passes from the base at times were inclined to be erratic, but more often than not they reached the safe hands of McAfee, who incidentally took Laybourne's place at fly-half just after the start. Try as they might the Bart's three-quarters could not penetrate a most stubborn opposition. Pleydell, playing in an unusual position for him at centre, tried everything, even that often successful manœuvre of a fast three-quarter of doubling round to the opposite side after receiving—(shades of Obolensky)—but to no avail. There was always someone there for the tackle, and often he was a forward. And how good some of them were! One wished that some of the Bart's players would profit by the good example being set them, for to-day they were at times peculiarly lethargic.

The centres might have let the ball out more quickly to the wings when they were being so constantly checked. As it was Griffiths and Hayes were completely starved, or else the pass arrived when it was too late to be any good. Up to a point the three-quarters' defence was good, but as the opposition began to take control in the second half their tackling was often found wanting. Amongst our forwards the heavier ones were more conspicuous, Moynagh,

GRAND STAND APPEAL :: BART'S R.U.F.C.



Contributions should be made payable to
Hon. Treasurer,
St. Bartholomew's R.U.F.C.

THE GRAND STAND at Chislehurst seats 250 people. It cost £600, and of this amount £400 remains to be paid.

Dr. GRAHAM has kindly given security to the Rugby Football Union, who have lent the Club £400, provided this sum is paid off in the next few years. Not less than £60 has to be paid off every year.

Seats taken in the Stand for the last two matches:

v. Metropolitan Police, 34.

v. Rugby, 151.

McPherson and Gauvain in particular. It is a pity that the latter is not always a safe catch in the line-out, for his size and height are invaluable in that position. Ellis was playing a good game till his activities were most unfortunately cut short when he received a boot on the nose which necessitated his retiring from the game.

The first half produced two scores from the Army and one from Bart's. After a dropped pass by the Bart's three-quarters, Arengog-Jones dribbled through, picked up, was tackled well by Evans on the line, but from what appeared to be a pass off the ground France was up to score, and convert the try. Later on Sergt. Ibbitson ran strongly to score in the corner. Both McAfee and Pleydell relieved the constant pressure by well-judged kicks. Once Pleydell broke through with the whole field in full cry behind, but his kick ahead over the full-back just went dead. From a loose scrum on the Army "25" Hearn gave to Burrow, who passed to Laybourne, who ran through a host of players to score a very good try near the posts. McPherson failed with the kick. Thus at half-time the score was 8-3 against, and things were not too bad.

However, on resumption (by then we had lost Ellis) the Army team's continual hammering and throwing the ball about, and especially the backing up, were bound to tell. Four goals and a try were scored in this half. Towards the end Evans came up in the Bart's attack to send Griffiths over for a good try in the corner, which McPherson converted with a magnificent kick. "No side" came soon after.

A good game to watch, as it was very open and fast. Bart's should have done much better, but Candler's guiding influence and steadiness, especially in adversity, were sadly missed.

November 5th *v. Metropolitan Police.* Lost 11-6.

v. Rugby. Won 22-15.

Played at home. Bart's got going from the word "go", and scored 22 points in the first half, the forwards getting the ball and every outside doing his job well.

In the second half, against the wind, the side as a whole tired a little and were unlucky to have 15 points scored against them—these included a penalty and two dropped goals.

v. R.M.A. Lost. November 15th.

Let us mention early in our account of this regrettable contest the one extenuating factor—only five members of the 1st XV played. There however the excuse begins and ends.

The "Shop" kicked off, and went to work from the first second. This needless to say should not happen; everyone playing knew that, but the conventional ten minutes for regaining consciousness must apparently be observed. So Bart's dithered around the proximal portion of their own "25" for fifteen minutes or so, woke up and scored a rather fortuitous try through Hayes, who incidentally played a safe game, MacPherson added with a fine kick, and then the side pulled the bedclothes over their heads and waited for the nasty men to go away.

The unfair part of the game was that the "Shop" forwards had done some training, and occasionally broke into a sharp trot which seemed to embarrass our pack quite a little. In the 29th minute the Bart's eight awoke sufficiently to get offside in their own "25" and forfeited a penalty goal, which left us down at the turn, a "Shop" outside having previously dropped a goal.

After the interval the outsiders joined the forwards in the customary post half-time blues. The service from the scrum, even allowing for the fact that we rarely got the ball, was poor, the stand-off half commenced to miss his man, the right centre to try to do too much, and his wing to tackle around the chest.

Talking of tackling, the forwards lost interest in this branch of the game in the second half, and it was through this that we forfeited another try, through the aforementioned defensive weakness in the outsiders that we gave away a goal, and through the skill of our opponents that we lost another four points from a drop-goal.

Honourable mention must go, however, to Macpherson, Collinson and Burrow, especially to the touch-kicking of the latter, which was splendid.

v. Bedford, at Bedford on November 19th, 1938. Lost 37-0.

The large score of 37-nil was accumulated against the Hospital largely by the workman-like activities of the Bedford forwards, supported by a hard-tackling and opportunist three-quarter line. Of the five goals and four tries scored, only three were of an entirely constructive nature right from the base of the Bedford scrum. Following upon errors of handling or tactics by the Hospital, the remaining scores were excellent examples of plentiful and intelligent

backing-up—a highly-prized, match-winning virtue which can pull almost any game out of the fire.

From the stand it was regrettably noticeable that the Hospital team as a whole were suffering from a grievous complaint—an epidemic of high tackling, at the best of times an unwise procedure, but fatal against a fast and heavy team, as they were left upon their feet to continue the movement, instead of biting the dust, morally and physically.

Nevertheless the Hospital team were well able to keep the game interesting; indeed they gave Bedford some uncomfortable moments with rather too individual forward rushes, a dangerous cut-through by Candler, and by Macpherson's penalty kick which bounded off the upright. The touch-kicking of Candler and Burrow brought forth applause from the crowd, as did some neat saves by Evans at full-back, who put in much good work in a busy afternoon.

HOCKEY. *v. St. John's College.* October 22nd. Lost 2-3.

Played at Cambridge, where the pitch was, as usual, in good condition and a very good game resulted, which we were a trifle unlucky to lose.

An altered forward line played cohesively, on the left side of the field especially, and T. N. Fison showed great promise on the left wing. At half-time the score was 2-nil in our favour.

Resuming. St. John's took two easy goals from first-time penalty corner shots, a technique we might ourselves employ with advantage, but it must be said in fairness to Akeroyd in goal that stragglers obscured his vision on both occasions.

Victory went to the College when a few minutes later their centre-forward scored.

v. Maoris. October 29th. Won 9-0.

This fixture in which the New Zealand Shipping Company entertained us at Worcester Park was a last-minute one, which, unfortunately, produced a most uneven contest. The Company's hospitality quite atoned, however, for the game itself, though this, at least, gave the forwards a good dose of confidence, and showed them how low a percentage of shots get through when the goal-keeper is inspired.

Our opponents were without two good players owing to injury.

E. J. Griffiths supported the forwards well and kept them busy all the time; R. W. Brewerton at left half also gave a good display of stickwork.

v. St. Mary's. November 5th. Lost 2-4.

The pitch at Teddington was easily the best we have enjoyed this season, and the game was correspondingly fast. We showed a first half equality at least, though Mary's opened the scoring through their centre forward. Almost immediately, however, J. L. Fison equalized, and before half-time he added our second goal. St. Mary's left inside was a good player, seemingly unmarked; at any rate he bore a charmed life, and scored three times in the second half, once from a penalty corner.

A most excellent firework party followed, and some good teamwork with the rockets resulted finally in a direct hit on an upper window, missing, we learned afterwards, by a hairsbreadth, an unfortunate caged fowl seated therein. Apologies followed!

v. U.C.H. Wednesday, November 9th. Won 8-4.

v. Bank of England. Saturday, November 12th. Drawn 2-2.

Played for the second year in succession at Roehampton. The ground was a little softer than usual, and several of those who persisted in wearing summer foot-gear found themselves rapidly face to face with Mother Earth.

In the first half the defence, wearing orthodox boots, still lacked cohesion until the shock of two sudden goals by the House restored them to their senses. In the second half the whole side settled down, and soon levelled the score. Further than this we could not go, in spite of repeated attacks.

R. Heyland (1), and J. L. Fison (1) scored the goals, while A. G. E. Pearce at right half played his usual dashing game, and ended one valiant rush by colliding violently, in the old style, with the opposing right wing, who thereafter took no active interest in the game.

We should have won, but the terrible lapses of last season were still with us; they are becoming fewer, however, with each succeeding game.

	P.	W.	D.	L.	Goals.	
					F.	A.
1st XI, to November 12th	10	3	2	5	31	28

2nd XI. The second XI have so far had only a moderate season, after their victory in the Cup last year.

	P.	W.	D.	L.	Goals.	
					F.	A.
To November 12th	7	3	0	4	24	21

They lost to Beckenham III, Staff College Owls, Reigate III and Folkestone Optimists II, beating Chelmsford II, St. Mary's II and St. Thomas's II.

ASSOCIATION FOOTBALL CLUB

Now that the club, by unanimous decision to withdraw from the London University Senior League at the annual general meeting of last year, has secured a new lease of life as far as clean and enjoyable football are concerned, the prospects for this season are decidedly encouraging, and we look forward to fielding two strong teams. Several of last year's first eleven remain, and there are a number of new and useful members who show considerable ability. Judging from one or two games of this year, the first eleven, led by P. M. Elder, has considerable scoring capacity, but on paper the defence does not seem all that it should be, since in every game of the season at least one goal has been ceded. The back lines of the second eleven are steady, and the halves show initiative in defence and attack, but the forwards yet remain to settle down to improve their record of a total of two goals in four matches. So great is the competition for some positions that it is difficult to know whom to exclude from the elevens. The best constitution of the teams remains to be seen, since up to date several players have been absent through various reasons.

A match is being played against Parsloes and District Football League on Sunday, December 11th—sixpence entrance fee and the proceeds are going to one of the funds connected with the Hospital. Bring all your friends and relations to shout against the threatened invasion of four hundred and fifty supporters of the other side.

1st XI. v. Old Malvernians. October 29th. Home. Won 6-1. For so early in the season the team-work of the players was very encouraging. Bart.'s had most of the ball for nearly all the game, and the combination of the forwards and the use of the wings made for a more potent attack than usual.

1st XI. v. Old Aldenhamians. November 5th. Home. Lost 0-3. Although not with a representative side and with the absence of our usual centre forward, A. R. James, strongly felt, we did well to lose by no more than three goals. From the start the opponents played well together, having most of the game, and with individual players outstanding. The first goal was scored from a centre by the right wing when the ball came high across the goal-mouth and dropped into the net. This was followed soon after from the left by two low and accurate ground shots which just went inside the post.

1st XI. v. Guy's Hospital. November 12th. Lost 0-2. For only ten men, although Bart.'s men, to include three reserves in their first away match, and combat a strong Guy's eleven which played the ubiquitous Rees, is to spell misfortune. Praiseworthy it was, then, that we only lost by two goals to nil. A couple of goals expertly headed from two of their many corner-kicks gave our goalkeeper no chance and Guy's a lead at the interval. Thereafter we had the better of the game, despite some inexpedient muddling (stentorian cries of "Right!" would help in this respect). James and Osment would have scored had they not been out-numbered; Brenman made a good debut, as did Elder's new boots. Gallimore worked unceasingly, and with the rest of the defence ran endless miles to cover up the inevitably unmarked opponents.

SQUASH CLUB Clinicals v. Pre-clinicals.

In the first match of this series, on November 8th, the Pre-Clinicals arrived eager to stain their racquets with Clinical blood, but the Clinicals returned with their pride and a 5-0 victory.

A. J. H. Spafford beat Y. Y. Gabril in three short games, but was perhaps lucky to win with the loss of so few points.

J. T. Robinson beat F. J. Bromfield 3-1, the latter playing some good squash at the beginning, which was later obscured by weariness.

J. J. Slowe beat R. Boyce 3-2. This pair had the best game of the evening, politeness and hard-hitting predominating.

R. S. Murley and P. C. Collinson beat J. Bullough and J. Cullen respectively, in the minimum of games, much to undisguised relief of the former pair.

v. St. John's Wood S.R.C. November 3rd. (Thursday). Won 5-0.

For this match W. A. Oliver and R. C. Witt, stalwarts of last year's side, returned to the team.

St. John's Wood were not as strongly represented as usual, due to Cumberland Cup calls, but nevertheless some close matches were seen.

Marrett, as yet unbeaten this year, was made to run about by a player twice his age, but youth told in the end. Spafford once again showed an absolutely indecent amount of energy in the court, his retrieving at the back of beyond causing his opponent utter despair. James, Oliver and Witt all had comfortable victories, Oliver's long reach and Witt's angle shots frequently embarrassing their opponents.

Results:

H. R. Marrett beat A. L. C. Chalk 3-9, 9-3, 10-8, 9-6.
C. T. A. James beat R. L. Carr 9-2, 6-9, 10-9, 9-6.
A. J. H. Spafford beat I. M. Service 6-9, 9-3, 9-2, 7-9, 9-2.
W. A. Oliver beat H. C. French 9-4, 9-3, 9-6.
R. C. Witt beat A. L. G. Roberson 10-8, 9-6, 9-2.

GOLF In our second round of the Inter-Hospital Cup Competition the Hospital met Westminster Hospital. The match was played at Bromley and Bickley Golf Club, and was won by Bart.'s by 7 matches to 5 matches.

H. Robbins (3/1)	. . . . . 1	Llewellyn	. . . . . 0
A. L. Frazer (6/5)	. . . . . 1	Dods	. . . . . 0
R. S. Russell-Smith (5/4)	. . . . . 1	Gibbon	. . . . . 0
G. K. Marshall (6/5)	. . . . . 1	Smith	. . . . . 0
W. H. McAleenan	. . . . . 0	Brigstock (4/2)	. . . . . 1
J. A. Smith	. . . . . 0	Peak (1 up)	. . . . . 1
J. Cawthorne	. . . . . 0	Daynes (6/5)	. . . . . 1
J. G. Nel (1 up)	. . . . . 1	Sutton	. . . . . 0
	5		3

Robbins } 0	Llewellyn } (3/2) 1
Nel } 0	Dods } 0
McAleenan } (3/2) 1	Smith } 0
Russell-Smith } 1	Gibbon } 0
Frazer } (4/2) 1	Peak } 0
Cawthorne } 0	Brigstock } 0
Marshall } 0	Sutton } (w.o.) 1
Smith } 0	Daynes } 1
	2
	2

In the Semi-Final Round we met St. Thomas's Hospital at Addington Palace. The match was won by Thomas's 8½-3½.

H. Robbins (2/1)	. . . . . 1	Kelly	. . . . . 0
J. Cardwell	. . . . . 0	Barrett (4/2)	. . . . . 1
A. Thomson	. . . . . 0	Harvey (2 up)	. . . . . 1
A. L. Frazer	. . . . . 0	de Courcy (1 up)	. . . . . 1
P. A. Knill-Jones (3/2)	. . . . . 1	Kenrick	. . . . . 0
G. K. Marshall	. . . . . 0	Large (3/2)	. . . . . 1
R. S. Russell-Smith	. . . . . 1	Nimmo	. . . . . 1
W. H. McAleenan	. . . . . 0	Belcher (4/3)	. . . . . 1
	2½		5½

Robbins } 0	Kelly } (2/1) 1
Cardwell } 0	Large } 1
Thomson } (2/1) 1	Barrett } 0
Knill-Jones } 1	Nimmo } 0
Frazer } 0	Harvey } (6/4) 1
Marshall } 0	Kenrick } 1
Russell-Smith } 0	de Courcy } (6/5) 1
McAleenan } 0	Belcher } 1
	1
	3

S.C.H. ALPINE CLUB

A party of five went to North Wales for the week-end of October 21st-22nd. Contrary to tradition the weather was excellent. On the Saturday two of the party were introduced to rock-climbing for the first time. We made a leisurely ascent of the Gashed Crag on Tryfaen, and then divided into a bathing party for Llyn Bochlwyd, and a climbing party for Glydr Fach by the Slab route. The veil of autumn mist cleared from the hilltops in the evening, and two of us will never know whether it was a bar of cloud or Ireland that we saw far out beyond Holyhead. On the Sunday we did the Rocker Route on Lliwedd. In the afternoon three of us became involved in a minor rescue party, so that we were not all off the rock until dark. However, we were rewarded, as we walked back to Pen-y-Pas, by the starlit silence of the cwm and Snowdon reflected in its dark mirror.

We reached London at 6.30 a.m. on Monday after eleven hours driving through midland fog.

FENCING CLUB Of the first four matches arranged for the season, two were scratched by our opponents, while in the other two we were handicapped by the unavoidable absence of senior members. Despite this, after a thoroughly enjoyable match we lost by the narrow margin of 12½ fights to 14½ against London Hospital on October 22nd. The team was further depleted in a match against Westminster Hospital, which was lost by 7 fights to 11.

Additional fixtures for December may be arranged, as it is hoped to fight the first round for the Inter-Hospital Cup on December 17th against Westminster Hospital.

REVIEWS

St. Bartholomew's Hospital Reports, Vol. LXXI, 1938. (Murray.) Price 21s.

An interesting volume. It compares favourably with similar products of other medical research centres. The absence of dogmatism and the willingness to admit incompleteness are in refreshing contrast to much pseudo-scientific medical journalism.

I found the most interesting paper that on "The Post-operative Administration of Fluids" (VI). The restoration of normal fluid and electrolyte balance in the blood in intestinal obstruction, peritonitis, uraemia, shock, etc., has been one of the major problems of surgery. This paper, from the combined Medical and Surgical Units, illustrates the tendency to base administration of fluids, quantitatively and qualitatively, on accurate biochemical blood studies, thereby eliminating guesswork and the sometimes dangerous reliance on "surgical judgment".

Here a warning—such work is often regarded as "interesting confirmation of things we knew already". It should point the way to a real advance in technique. It may be argued that the necessary facilities can only be available in specially equipped hospitals. A strange paradox if the refinements are only to be at the disposal of those presumably best equipped with "surgical judgment" as well. The B.M.A. recently, in pressing for the limitation of Austrian medical refugees to 50 per year, stressed the overcrowding of medicine here. Looked at from this one angle alone, surely the extension of modern methods of surgico-biochemical symbiosis to all hospitals throughout the country would absorb a large number of trained medical biochemists. One wonders how long the fiction will be perpetuated that medicine should remain "aloof" from its own essential involvement in politics and economics.

In the remaining papers, Sir Girling Ball adds useful reports to the existing records of that interesting injury, the Ruptured Urethra (II).

Dr. Hadfield, "The Rheumatic Lung" (III), states that "most of the published descriptions have lacked precision". He has remedied that defect.

"An Analysis of the Complications and Fate of Diabetic Patients attending a Follow-up Department" (IV) is rather muddled and less valuable.

"Thyroidectomy for Angina of Effort" (V) confirms existing reports, and stresses the importance of careful case selection.

Mr. Boyd (VII) describes a useful experimental addition to our understanding of the complexities of blood formation. His classification of Thrombo-angiitis Obliterans (X) is excellent. Mr. Knight adds a study of Erythro-cyanosis Trigida and Chronic Edema of the Leg (XI). Both these papers on peripheral vascular disease discuss the value of sympathectomy, and show the value of accurate localization of obstructive vascular lesions by arteriography and phlebography respectively.

Mr. Rodgers and others (VIII, IX and a note in XV) contribute valuable observations that should help to evaluate Gastrosocopy. They have shown that gastric ulcer cannot be excluded without gastrosocopy.

Mr. McGavin (XIII) reviews 100 cases of Prostatic Carcinoma. His conclusions are in line with opinion elsewhere. It is interesting

to find him in agreement with the Americans, who insist that the radical perineal operation has still a place in the treatment of early cancer.

The "Life of Samuel Jones Gee" (XIV) I found boring. I see no reason why biographers should revert to the literary style of the period they are describing. Some may not agree.

In conclusion: A most interesting volume.

Thus We are Men. By Sir WALTER LANGDON-BROWN, M.A., M.D., Hon.L.L.D., F.R.C.P. (Kegan Paul.) Price 10s. 6d.

The experience of a lifetime devoted to the observation of man in his pathological manifestations, both physical and mental, and an extensive literary knowledge, are the foundations of this unique book. Sir Walter Langdon-Brown has seen many changes, many ages of medicine come and go, and now from the calm atmosphere that surrounds the consulting physician, he turns and looks at man.

The further evolution of man physically is improbable and mentally unlikely he argues, so that only psychological evolution remains. That is the main theme with variations that runs through the book, which is built up upon a series of essays and addresses to societies.

To develop in this way we must understand ourselves and learn to co-operate intelligently and voluntarily. This is well illustrated in the first chapter entitled "Biology of Social Life". The relation of the individual to the community is compared with the obedient co-operation of the cell with the body. There are two opposing tendencies in human life—the one tolerant, tending towards enlargement of the unit, the other intolerant, tending towards segregation. The fruit of the first is internationalism, of the second nationalism. In this way the hysterical and fanatical worship of the State in certain parts can be explained as the reaction of the segregating impulse to international tendencies, and this entails repression of the freedom of the individual with destructive effect upon creative abilities. Fundamentally this is true; in practice the reaction against internationalism is the work of Big Business.

The author traces this reaction further in the revolt of modern literature against reason, the reaction of emotion against convention. He treads heavily on Mr. James Joyce's efforts in prose: "This slapstick raised to art"; "The pendulum has swung too far".

Again the modern interest in psychology is the reaction against the materialistic attitude of medicine in pre-war years, and so are the pathological side-reactions: osteopathy and christian science.

In the next three chapters the psychopathology of the individual is discussed: the reaction to excessive internal inhibition, the retreat from unbearable reality into phantasy. The mechanisms of neurosis are explained and illustrated by case-reports. Though critical of the tenets of Freud and Jung and more inclined to follow Adler, the author is of the opinion that each of these schools presents one aspect of the truth.

The next section is "an attempt at interpreting the writings of certain authors as a revelation of the workings of the unconscious mind". Considerable ingenuity is shown in examining the works

of Barrie (*Peter Pan*, *Mary Rose*) from this view point. Sir Walter does not conceal his contempt for some post-war writers. His remarks on James Joyce we mentioned above. "D. H. Lawrence had great literary gifts . . . fatally damaged by his psychoneurosis"; and then should we disagree with him we are branded psychoneurotics: "A generation with minds undamaged by the war (which war?) and the scarcely less disastrous peace . . . will recognize this fact." But in his retrospect he does admit that belonging to a pre-war era, he himself is bound to feel less at home in this stark age, where "modern music is discordant cacophony, modern sculpture meaningless distortion, modern pictures hideous". This is an age of Realism—so our elder statesmen say (see Munich). We prefer to look at the world as it is and not as it ought to be.

Then again Cambridge to the author is Cambridge of the Golden Nineties, where "habits of early rising are contracted; lofty ambitions stirred . . . the neat little banquets . . . Ye Gods!

This is a challenging and ingenious book. Although we disagree with several statements therein, we beg to congratulate the author on its writing.

Minor Medical Operations. By KENNETH HARRIS, M.A., M.D.(Cantab.), F.R.C.P.(Lond.), and EDITH HARRIS, M.B., B.S.(Lond.), D.P.H.(Eng.). H. K. Lewis & Co., Ltd. Pp. x + 198. Price 7s. 6d. net.

In writing this book for senior medical students and recently qualified practitioners, the authors have had in mind that the average medical student, by the time he qualifies, knows far more about the theory than the practice of medicine. They have therefore assembled a fairly complete series of practical procedures which are in everyday use, and they have set out clearly and in order the various steps which are necessary in carrying out the technique in each case. It is natural that, in a volume of this size, it is not possible to devote space to alternative methods, and the authors have thus been compelled to make an arbitrary selection. It is clearly impossible in this way, to detail methods which will satisfy everyone yet, on the whole, the selection is such that the great majority will be satisfied. Perhaps it is permissible to criticize the method of pneumothorax refill described, for the apparatus selected for description is so complicated that it is necessary to devote almost two complete pages to a series of tables which show what happens when various clips are released, and this type of apparatus can only be regarded as suitable for the expert. There are several much simpler models which could be substituted with advantage.

It is difficult to suggest further methods for inclusion in subsequent editions; perhaps the chief necessity is for a description of the continuous drip method of giving a blood transfusion. There is little which is redundant, but it is very doubtful whether cisternal puncture is worth including in a book which is not intended for the specialist on nervous diseases.

The second part of the book is devoted to the general care of the patient and to certain simple procedures such as the application of poultices, plasters, etc. This is a most valuable section, and one which is likely to be very helpful to the recently qualified practitioner.

The book fulfils a very definite need, and contains much practical information which is not otherwise readily available. It is therefore well worthy of a place in the library of the student and the recently qualified man.

RECENT BOOKS AND PAPERS BY ST. BARTHOLOMEW'S MEN

- BOWES, G. K., M.D., M.R.C.P., D.P.H. "Some Doubts about Health Insurance." *Medical Officer*, September 10th, 1938.
- CAPENER, NORMAN, F.R.C.S. "Orthopaedics in Rheumatoid Arthritis." *British Medical Journal*, August 20th, 1938.
- CHOPRA, R. N., C.I.E., M.A., M.D., Sc.D., F.R.C.P., K.H.P., I.M.S., DAS, N. N., and MUKERJI, B. "The Action of Certain Cardiac Drugs on Embryonic Heart Explants." *Indian Journal of Medical Research*, July, 1938.
- and MUKERJI, B., and CHAKRAVARTY, M. "Studies on some Dextro-Rotatory Hydrocupreidine Derivatives. Part I. Comparative Haemolytic Activity." *Indian Journal of Medical Research*, July, 1938.

- CHOPRA, R. N., C.I.E., M.A., M.D., Sc.D., F.R.C.P., K.H.P., I.M.S., and ROY, A. C. "The Effect of Seitz Filtration on Haemolysis and the Components of a Haemolytic Serum." *Indian Journal of Medical Research*, July, 1938.
- (A. C. ROY and R. N. C.) "Some Biochemical Characteristics of Snake Venom." *Indian Journal of Medical Research*, July, 1938.
- CHRISTIE, RONALD V., M.D., M.R.C.P. "Dyspnoea: A Review." *Quarterly Journal of Medicine*, July, 1938.
- COCKAYNE, E. A., D.M., F.R.C.P. "The Genetics of Transposition of the Viscera." *Quarterly Journal of Medicine*, July, 1938.
- COLEMAN, FRANK, M.C., L.R.C.P., M.R.C.S., L.D.S. "Pyorrhoea Alveolaris: Diagnosis and Treatment." *Medical Press and Circular*, July, 1938.
- CUMBERBATCH, ELKIN P., B.M., D.M.R.E., F.R.C.P. "Electrotherapy in General Practice." *Practitioner*, August, 1938.
- CUTHBERT, T. M., M.R.C.S. "Effect of Induced Hypercalcaemia on Excessive Psychomotor Activity." *Lancet*, September 10th, 1938.
- DALRYMPLE-CHAMPNEYS, SIR WELDON, Bart., M.D., F.R.C.P. "Undulant Fever." *Lancet*, August 6th, 1938.
- HADFIELD, GEOFFREY, M.D., F.R.C.P. "The Rheumatic Lung." *Lancet*, September 24th, 1938.
- HAMBLY, E. H., M.B. "Injury by a Steel Rod Piercing Perineum, Abdomen and Thorax." *Lancet*, September 17th, 1938.
- HANKEY, GEORGE T., L.R.C.P., M.R.C.S., L.D.S.E. "Three Unusual Affections of the Jaws: 1. Fibro-Myxo-sarcoma of Mandible; 2. Multilocular Cyst Arising from a Maxillary Dental Cyst; 3. Xanthomatosis or Lipoid Granulomatosis of Mandible (Schüller-Christian Syndrome)." *Proceedings of the Royal Society of Medicine*, July, 1938.
- "Focal Osteitis of the Mandible Simulating Osteogenic Sarcoma." *Proceedings of the Royal Society of Medicine*, July, 1938.
- HEY GROVES, ERNEST W., M.S., M.D., B.Sc., F.R.C.S. "Fractures of Shafts of Forearm Bones." *British Medical Journal*, August 6th, 1938.
- HIGGS, S. L., M.B., F.R.C.S. "Injuries to Elbow-joint." *British Medical Journal*, July 23rd and 30th, 1938.
- HORDER, LORD, G.C.V.O., M.D. *Obscurantism. Conway Memorial Lecture.* London: Watts & Co., 1938.
- HOWELL, B. WHITCHURCH, F.R.C.S. "The Surgical Treatment of Rheumatism." *Rheumatism*, July, 1938.
- HOWKINS, JOHN, M.D., M.S., F.R.C.S. (C. J. C. BRITTON, M.D.N.F., D.P.H., and J. H.). "Action of Sulphanilamide on Leucocytes. A Report of Fifty Ambulant Patients." *Lancet*, September 24th, 1938.
- KLABER, ROBERT, M.D., M.R.C.P. "Match and Match-box Dermatitis." *British Journal of Dermatology and Syphilis*, August-September, 1938.
- LANGDON-BROWN, SIR WALTER, M.D., D.Sc., F.R.C.P. "The Medical Curriculum and Present-day Needs." *British Medical Journal*, September 3rd, 1938.
- MAXWELL, JAMES, M.D., F.R.C.P. "The Diagnosis and Treatment of Lung Abscess." *Medical Society Transactions*, vol. lxi, London, 1938.
- "Pneumonitis." *Lancet*, July 30th, 1938.
- MYERS, BERNARD, M.D., F.R.C.P. "The Essentials of Nutrition in Infants and Toddlers." *The Journal of the Royal Institute of Public Health and Hygiene*, September, 1938.
- PINKER, H. G., F.R.C.S. "Traumatic Rupture (complete) of External Iliac Artery; Amputation; Recovery." *British Medical Journal*, July 30th, 1938.
- ROCHE, ALEX. E., M.A., M.D., M.Ch., F.R.C.S. "Nephrectomy during Pregnancy for Unilateral Haemorrhagic Pyelonephritis; Normal Labour 4½ Months later." *Clinical Journal*, August, 1938.
- SCOTT, R. BODLEY, D.M., M.R.C.P. "The Iron-deficiency Anaemias." *Lancet*, September 3rd, 1938.
- SEDDON, HERBERT J., F.R.C.S. "Treatment of Tuberculous Disease of the Spine in Adults." *Proceedings of the Royal Society of Medicine*, June, 1938.
- (F. P. FITZGERALD and H. J. S.) "Lambrinudi's Operation for Drop-foot." *British Journal of Surgery*, October, 1937.
- THOMAS, C. HAMBLETON, F.R.C.S. "Treatment of Carcinoma in Pharynx and Larynx by Irradiation." *British Medical Journal*, August 27th, 1938.

TREVOR, DAVID, M.S., F.R.C.S. "Dislocations and Fractures of Thumb and Fingers." *Lancet*, September 3rd and 10th, 1938.

— "Dislocations and Fractures of Thumb and Fingers." *British Medical Journal*, August 27th, 1938.

WALKER, KENNETH M., O.B.E., F.R.C.S. "Problems of Celibacy in the Male." *Practitioner*, September, 1938.

WOODHAM, C. W. B., M.R.C.S., D.M.R.E. "Hyperplasia of the Male Breast Accompanying Malignant Disease of the Testis Treated by X-Rays." *Lancet*, August 6th, 1938.

EXAMINATIONS, ETC. CONJOINT EXAMINATION BOARD

Final Examination, October, 1938.

The following students have completed the examinations for the Diplomas of **M.R.C.S., L.R.C.P.**, and have had the Diplomas conferred on them:

Ballantyne, J. C., Brownlee, P. A. K., Burnett, J. A., Burrow, K. C., Craig, C. M., Ellis, A. R. P., Evans, D. G., Haggag, H., Halper, N. H., Hardie, P. J., Hearn, R. D., Hudson, E. G., Jack, R. D. S., Joyce, J. B., Maidlow, W. M., Maycock, R., Neatby, G. O. M., Rees, H. N., Shrinagesh, M. M., Stewart, E. F., Swinstead, P. D., Wheelwright, J. B.

CHANGES OF ADDRESS

ATKINSON, E. MILES, 123, East 61st Street, New York.
CUDDON-FLETCHER, A., 111, King Richard's Road, Leicester.
(Tel. 22411.)

DALE, W. CHALMERS, Adeoyo Hospital, Ibadan, Nigeria.

MARTIN-DOYLE, C., 46, Redlands Road, Reading, Berkshire.
(Tel. Reading 2384.)

SAMUEL, R. G., 2, Gloucester Crescent, Gloucester Gate, N.W. 1.
SQUARE, W. RUSSELL, The Quay, Hamble, Hants.

THOMSON, D. M., 24, Heathcote Road, Dartford. (Tel. 2040.)

WATERS, A. B., 151, Sheen Lane, East Sheen, S.W. 14. (Tel. Prospect 5621.)

WOODS, T. G. REWCASTLE, Tresillian, King's Avenue, St. Austell, Cornwall. (Tel. St. Austell 654.)

BIRTHS

PHILLIPS.—On October 20th, 1938, to Deryn (*née* Johnson), wife of Dr. E. H. D. Phillips, of Worcester Park, Surrey—a son.

RAINEY.—On November 10th, 1938, at St. Raphael's Nursing Home, Hove, to Margaret and Philip R. Rainey—the gift of a son.

THOMSON.—On October 19th, 1938, to Joyce (*née* Cansick), wife of Dr. D. M. Thomson, of 24, Heathcote Road, Dartford—a daughter (Ann Sheena).

WEDDELL.—On October 29th, 1938, at 20, Devonshire Place, W. 1, to Barbara (*née* Mills), wife of Dr. A. G. McD. Weddell—a daughter (Gillian Mary).

WYNNE THOMAS.—On November 1st, 1938, at Midgham Croft, Woolhampton, Berks, to Marjorie, wife of Dr. G. Wynne Thomas—a daughter.

MARRIAGES

BURNHAM-SLIPPER—BALDOCK.—On October 22nd, 1938, at Christ Church, Woburn Square, Charles Nelson Burnham-Slipper, M.R.C.S., L.R.C.P., only son of Mr. and Mrs. C. R. Burnham-Slipper, of Westcliff-on-Sea, to Beatrice Lorna, only daughter of Mr. and Mrs. G. Baldock, of Gillingham, Kent.

FULTON—PRESTON.—On November 12th, 1938, at Brompton Oratory, Captain Ian Noel Fulton, R.A.M.C., son of Lieut.-Col. and Mrs. H. A. Fulton, of 17, Gilston Road, S.W. to Deborah Susan, daughter of Mr. and Mrs. Douglas Preston, of 53, Drayton Gardens, S.W.

DEATH

CLEVELAND.—On November 11th, 1938, at St. Albans, John Wheeler Cleveland, M.R.C.S., L.R.C.P.

PERSONAL COLUMN



The cost of Advertising is 1/- a line of 7 words; 6d. to Subscribers. If a box number is used a charge of 1/- extra is made. Advertisements should reach the Manager of the Journal not later than the 15th of the preceding month.

All is not lost save love.

FAMILY RESIDENCE.—93, Inverness Terrace, Hyde Park, W. 2. Eight bedroom studies, communal lounge and dining-room. From £2 5s. per week, inclusive. Easy access to West End and City. Bay 5857.

CENTRAL ROOM (f'd or unf'd).—Quiet. Suitable for student or journalist. 18/- week.—Write MOODY, 57, Red Lion Street, Holborn.

PAYING GUESTS.—A few received in detached private residence; high and healthy position; easy access all parts. Large well-furnished bed-sitting rooms, fitted H. & C. water. Partial board from £2 10s. Own private garage adjoining, 5s.—77, Vivian Avenue, Hendon Central. Phone: Hen 8599.

KEITH VARTAN very gratefully acknowledges anonymous Bart.'s donor's gift of valuable early English stamps and requests better acquaintance.

1, CLEVELAND GARDENS, W.2.—Pad. 5457. A few vacancies for Post-graduates in small, comfortable private Hotel. H. & C. in all rooms. Partial board from 45/-. Twenty minutes from Hospital.

WINTER SPORTS—WENGEN. Dep. December 23rd and 30th, 16 days, *all inclusive*, £14 14s. Free Ski-ing instruction. Particulars from PETER MALING, St. Thomas's Hospital, S.E. 1.

MICROSCOPE.—Watson "Service". $\frac{1}{8}$ " and $\frac{3}{8}$ " objectives; two eyepieces. Excellent condition. Offers to B. J. D. SMITH, Students' Union.